

LITTELL'S LIVING AGE.

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{ From Beginning
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THE MAIDEN SLEEPS.

TRANSLATED FROM THE GERMAN.

The maiden sleeps — why mourn ye in this wise,

Ye parents? Let her rest.

The little face that mid the flowers lies

Speaks to your aching breast :

"My lot is light ; oh, wherefore weep ?

I lay me down in peace, and sleep."

The maiden sleeps.

The maiden sleeps — wearied from play, to rest,

Tired out with happiness.

The doll the little arms had fondly pressed,

The pretty Sunday dress,

Her story-book remembered not —

All, all, her treasures now forgot —

The maiden sleeps.

The maiden sleeps — her life was peaceful made,

And light her earthly lot,

A little stream that through the flowers strayed,

With love and music fraught :

No bitter grief the child's heart pained,

Soon was the short fight fought and gained —

The maiden sleeps.

The maiden sleeps — how blest she slumbered in

Her tender Saviour's arm ;

That spotless heart, unsoiled, unstained by sin,

No earthly fear could harm ;

A conscience pure, a sinless breast,

This is a couch the head to rest —

The maiden sleeps.

The maiden sleeps — earth's pain, earth's strife no more

May break that sweet repose ;

Know'st, mother, thou, what might have been in store

For her, of bitter woes ?

She feels no more the tempest's beat,

Feels not the summer's sultry heat —

The maiden sleeps.

The maiden sleeps — only one short calm night,

That peaceful sleep will last ;

And, oh, how bright the morn that greets her sight

When that brief night is past !

He who by His resistless will

Soothed Jairus, lives and comforts still —

The maiden sleeps.

The maiden sleeps — and now the last kiss press

Upon the lips so still.

The Father help thee in thy sore distress ;

O mother ! 'tis His will.

Now, as they bear her to her rest,

Sing ye the hymns she loved the best —

The maiden sleeps.

The maiden sleeps — now, Shepherd, take her

home,

Thine for eternity ;

Ye glorious stars, bend down from heaven's dome,

Watch o'er her tenderly ;

O wind, howl not so loud and shrill

Over this little flower-decked hill —

The maiden sleeps.

Chambers' Journal.

SABBATH REST.

THE Sabbath is a type of Heaven's own sweetness,

A hallowed foretaste of its life and light,

A day of rest, foreshadowing the completeness Of days which know no night.

Six days of weariness and toil, succeeded

By the calm quietude of Sabbath rest,

Train us to welcome what we so much needed,

And make it doubly blest.

Here our best joys and fairest flowers are mortal ;

We can but rest in peace one day in seven ;

But yonder, soon as we pass Death's dread portal,

Eternal rest is given !

The Sabbath here, in high communion blending

With Christ, and all the heaven-bound pilgrim train,

Is more than blessed, but soon it has its ending,

And earth is earth again.

But yonder, in the land of milk and honey,

Where Jordan flows, the rest is evermore —

One everlasting Sabbath, bright and sunny,

Shines on that blissful shore !

All is immortal there ; joys never wither,

And days no longer shadow into night :

With steady pace our feet are travelling thither,

To gain that land of light.

O happy Sabbath ! when the Church shall gather,

Escaped forever from earth's wearying strife,

Like children round the table of their Father,

To live the deathless life ;

And join the rapturous song of adoration

With all who fought the fadeless crown to win.

O endless Sabbath ! Chorus of salvation !

When will thy joys begin ?

Sunday Magazine.

From The Edinburgh Review.
ARCTIC EXPLORATION.*

THE long series of English expeditions for Arctic exploration, commencing in 1818, came to an end, in 1859, with the return of the "Fox" and the certain knowledge of the fate of Sir John Franklin and his companions. The general feeling of the country was opposed to any further exploration of polar seas; it was maintained that such exploration had no object commensurate with the risk which it entailed; the mystery which had hung over the voyage of the "Erebus" and "Terror" had been painfully cleared up by McClintock and Hobson; the North-West Passage, the dream of centuries, had been found by McClure, and for all purposes of practical navigation and commerce had been proved useless; the mere determination of desolate coasts, of barren and uninhabitable lands, or of seas and straits which could not be sailed over, was a vain and idle fancy of map-makers and geographers: the demands of science were misunderstood, her claims were scouted, and the North-West Passage, with all that belonged to it, was classed as a wild and chimerical delusion. This condition of the public mind was, in

reality, the necessary recoil from the extreme tension which had been kept up for so many years; and it was quite certain that after a due period of repose the restlessness of mind and body, which seems the distinguishing characteristic of English energy, would again seek an outlet in geographical enterprise and maritime discovery.

After all, the problem, which for more than three hundred years had occupied men's minds, had been solved; useful, or not useful, the North-West Passage had been found; and when, to adopt the appropriate figure, we rounded to, it was after we had carried through our venture, and had triumphed over difficulties which had baffled all former ages and all other nations. If these latter, profiting by our experience and example, have been continuing on the course of polar exploration, it is not as completing any work which we had undertaken; if we now enter on a new voyage, it is not as again taking up a work which we had left unfinished; whether we succeed or do not succeed, the aims and objects now before us are totally distinct from those which we have had before us in times past: success or failure will belong to the present only. If the expedition now being fitted out should reach the North Pole, it will, none the less, be the first expedition which, within nearly fifty years, has left our shores with the avowed intention of seeking it; and it will, none the less, be the first expedition which any government has carefully and deliberately fitted out for that purpose.

It is right to state this clearly and explicitly at the outset; for during these last few years a great deal has been said about English rights and English duties; as if we had long ago pledged ourselves to find the North Pole, and are to be accounted recreant sluggards for not having ere now found it; or as if the Arctic was an English preserve, and any other people trying to explore it were intruding on our private domain. Of course, such an idea, even if correct, would be purely sentimental; but as the case stands, it is altogether ungrounded. We have as yet never seriously attempted to

* 1. *Papers and Correspondence relating to the Equipment and Fitting-out of the Arctic Expedition of 1875, including Report of the Admiralty Arctic Committee.* Presented to both Houses of Parliament by Command of her Majesty. 1875.

2. *The Threshold of the Unknown Region.* By CLEMENTS MARKHAM, C.B., F.R.S., Secretary of the Royal Geographical Society. 8vo. London: 1873.

3. *A Whaling-Cruise to Baffin's Bay and the Gulf of Boothia, and an Account of the Rescue of the Crew of the "Polaris."* By ALBERT HASTINGS MARKHAM, F.R.G.S., Commander, Royal Navy. 8vo. London: 1874.

4. *The German Arctic Expedition of 1869-70, and Narrative of the Wreck of the "Hansa" in the Ice.* By Captain KOLDEWEY, Commander of the Expedition, assisted by members of the Scientific Staff. Translated and abridged by the Rev. L. MERCIER, M.A. Oxon, and edited by H. W. BATES, F.L.S., Assistant Secretary, Royal Geographical Society. 8vo. London: 1874.

5. *Arctic Experiences; containing Capt. GEORGE E. TYSON'S wonderful Drift on the Ice-floe: a History of the "Polaris" Expedition, with the Cruise of the "Tigress" and Rescue of the "Polaris" Survivors.* Edited by E. VALE BLAKE. 8vo. New York: 1874.

6. *Mittheilungen über wichtige neue Erforschungen auf dem Gesamtgebiete der Geographie.* Von Dr. A. PETERMANN. 4to. Gotha: 1865-75.

find the North Pole; till now, we have never pledged ourselves to look for it; and we greet those brave men of other countries — Americans, Swedes, North-Germans or Austrians — who have ventured on the perilous quest, as fellow-labourers and honourable rivals in the work of scientific exploration.

It is thus that the present seems a fitting time to call attention to what these have actually done, and how they have done it; what they have sought and what they have found; above all, to the aims and objects, to the hopes and fears, of the expedition which our own government is now, after long and careful forethought, preparing to send out.

First then, and foremost, of these objects is geographical discovery. Within the polar circle there is an enormous area, comprising at least two million square miles, of which we know simply nothing. We shall have presently to speak of the various speculations regarding the nature of this vast extent of the world's surface; it is enough for our immediate purpose to say that we do not know anything whatever about it. Whether it is land, water, or ice; whether the climate is cold or warm; whether there are inhabitants, animals, plants, or whether it is a howling wilderness — speculation has included almost every possibility, and almost every absurdity; but of knowledge, such as alone intelligent men can be content with, we have absolutely none. To attain some such knowledge is the first object now proposed in Arctic exploration. It is considered unfitting and unseemly, in the present state of scientific progress, that there should be this large area of our own earth's surface still so utterly unknown. The examination of it is loudly called for; it is a problem of universal interest, the solution of which appeals not to commercial profits, pecuniary advantage and increased facility of transport or communication, but simply, in the first instance, to those higher feelings and yearnings which, whatever our remote ancestry, now distinguish us from the brutes. We want to traverse this

unknown space, and see and know what it is.

A reference to the beautifully distinct chart which has been published by the hydrographic department of the Admiralty will show that to enter this space there are only four ways — to the west of Greenland; to the east of Greenland, between it and Spitzbergen; to the east of Spitzbergen, between it and Novaya Zemlya; or through Bering's Straits — and it is familiarly known that by each route the difficulty in the way of advance is *ice*. Now ice, as it appears at sea, is of very different sorts, and presents obstacles of very different natures and of very different degrees of impermeability. There is, first of all, ice as it appears actually forming on the surface of the water, and which is frequently spoken of as bay-ice; this does not offer any serious difficulty to a stout ship, the weight of which can crush through, and the strength of which can resist. So far as is yet known, ice of this nature disappears with the winter; an extended sea, simply and permanently frozen over, has not yet been met with. Such ice is thus commonly enough called first-year ice; and we may understand that, so far as our present experience goes, first-year ice is not considered impassable, though it may be difficult.

But it is very seldom that ice is allowed to remain in this condition; the swell of the sea, transmitted sometimes through a great distance, or, still more, the rise and fall of the tide, break it up even as it forms; the pressure of the fragments, one against another, lifts them, tosses them, and piles them one over another, until they become heavy, solid, irregular masses, which are called *floes*; and a great number of floes driven together by wind, tide, or current constitutes *pack*. Pack, then, may be of very different degrees; if of light, or comparatively light, ice, loosely drifted together, a stout ship may pass through it, forcing the floes to one side or the other by a strongly defended bow; but if the floes are very heavy, and by the wind, or tide, or current, are pressed against a line of coast, or into a narrow channel, there

they freeze together, and that with a solidity which no ship that has hitherto crossed the Arctic circle can break through.

Icebergs are necessary to complete the ideal picture of an Arctic sea; but, strange as it may sound to many, icebergs are not sea-ice. An iceberg is the lower end of a glacier which, forced by the downward flow into the sea, is broken off by its unsupported weight, or torn off by the upward pressure of the water, and so floats away. Such masses of ice are often, as is well known, of prodigious size; the weathering of the upper part forms them into fantastic shapes resembling spires and arches and things beautiful or grotesque; below the surface of the sea they extend a long way. Ice, it will be remembered, floats with about seven-eighths of its volume submerged; and a huge hill of ice, such as an iceberg is, draws a great deal of water; so much so, that they are frequently to be seen grounded in 70, 80, or even 100 fathoms, that is to say, in from 400 to 600 feet.* It is by so grounding that they seriously impede navigation; if several large bergs ground near each other, they constitute a nucleus round which drift-ice collects, piles up, freezes together, and forms a pack of the worst kind. It was in such a pack that the "Fox" was caught in 1857, and held fast by it for eight months, whilst it drifted down Baffin's Bay and through Davis' Straits for a distance of nearly 1,200 miles.

Pack-ice, then, in its different forms, is the one distinct impassable hindrance to navigation. First-year ice, or loose drift, can, as a rule, be got through; icebergs can be evaded; but heavy pack, closely pressed together, is as unyielding as the solid rock, and is more dangerous, as being itself in motion. Now the nature of the pack depends, in a great measure, on the conditions or circumstances of its formation as such; that is, on the shape of the land against which it is pressed, and on its relation to the prevailing winds, the currents, or the set

of the tides; and the persistency of the pack in different places, as found by repeated experience in former Arctic voyages, has been in many instances satisfactorily explained by reference to one or other of these causes. It is thus, according to Sir Leopold McClintock, that the pack which held to the death the lost "Erebus" and "Terror" is primarily due to the wide channel between Prince of Wales' Land and Victoria Land, which "admits a vast and continuous stream of very heavy ocean-formed ice from the north-west, which presses on the western face of King William's Island, and chokes up Victoria Strait." "I do not think," he adds, "the North-West Passage could ever be sailed through by passing westwards, that is to windward of King William's Island."* A similar drift from the wide sea to the westward into the narrow strait between Banks' Land and Melville Island, may, to some extent, account for the heavy pack which has always been found there, which stopped Parry's progress to the westward in 1819, prevented McClure passing through Prince of Wales' Strait in 1850, and in the following year finally imprisoned him in the Bay of Mercy. Professor Haughton has however urged that in both these localities which we have instanced there is a meeting of the tides from the east and the west, and considers that the extraordinary pack which remains there is due, in a great measure, to this fact. This is still a disputed point, and Professor Haughton's meeting of the tides is, to some extent, at least, hypothetical; but admitting it fully, it would only tend more conclusively to show how geographical peculiarities, involving the trend of the coast, the prevailing wind and the tidal action, work together to cause the dense pack which has given these places such a terrible notoriety.

Geographers have thus been led to speculate on the existence or non-existence of pack in other places; and that with a freedom dangerous to the advance of accurate knowledge, and with an obstinacy unworthy of scientific inquiry.

* In the Antarctic, the icebergs attain still more gigantic dimensions; it would appear that in some instances they must draw nearly a thousand fathoms.

* Voyage of the "Fox." p. 314.

There is no branch of science so purely practical as geography; there is none in which theory, unsupported by actual observation, is so useless and leads to such contradictory results: the reason being that it is simply impossible to foretell how far the numerous forces of nature may counteract or balance each other in any named locality, how far there is a preponderance in any one direction, or what effect that preponderance may produce. But purely theoretical geography has been received with marked favour by many eminent writers, at the head of whom must be placed Dr. Petermann, the learned editor of the *Mittheilungen*, whose zeal and sincerity are far beyond doubt, but who has been led, by a partiality for mere abstract reasoning, to maintain the easy possibility of advancing to the North Pole by way of Spitzbergen, either to the east or west; an opinion supported by arguments which had convinced many, until the hard-won experience of the last five or six years showed their utter worthlessness, except as exercises of ingenuity. On the strength, then, of these arguments, purely theoretical and altogether fallacious as they are, Dr. Petermann has been hailed as a very high authority in all matters connected with Arctic exploration; a position far beyond his real merits, but which he has most worthily used to the direct advancement of geographical knowledge, by promoting expeditions, the results of which have contradicted his theories in every single point. It therefore seems proper, before entering on the history of these expeditions, to give a short abstract of the views out of which they originated; and we do so the more willingly, as they contain much that is in itself incontrovertible, and thus establish more distinctly the great geographical principle which we have already laid down, that all theory, which is not based on actual observation, is worthless.

The basis, then, of Dr. Petermann's theory is the Gulf Stream. We have no intention of entering here on any account or discussion of this stream, which is itself a favourite battle-field for geographers; we would content ourselves with the bare statement that a certain broad current of distinctly warm water does wash the western shores of Ireland, flow northwards, past the Hebrides and the west coast of Scotland, along the coast of Norway and round the North Cape; and that the very marked difference between the climate on the east and west sides of

the Atlantic, the fact that whilst the climate of Ireland is soft and mild, that of Labrador is extremely severe, that whilst the harbours of Norway are open throughout the winter, those of Greenland are sealed by frost, is due, in great part, to the presence on these eastern shores of this warm current: and we express no opinion on the source, the origin, or the cause of this remarkable current when we say that a very large majority of geographers have agreed to call it the Gulf Stream.

The warmth of this current as it passes the North Cape is still sufficient to keep the harbours and the sea immediately adjacent free from ice, but beyond this point its course has never been very satisfactorily traced; it is, however, admitted that it reaches the south-western shores of Spitzbergen, and is still able to influence the climate and modify the rigour of the seasons; but whether or how far we must attribute to it the open water which for six months of the year is found on the west coast, whilst the east coast is closed with impenetrable pack, would seem extremely doubtful. Dr. Petermann has maintained that this open water is a direct effect of the imported warmth; and supporting his views by this fact, has argued that the Gulf Stream, entering the Polar Sea from the south-west, and moving in a north-easterly direction, must soften the climate wherever it extends, and keep, or tend to keep, the sea clear as far as Novaya Zemlya on the east, and northwards as far as the pole itself. The Polar Sea is, therefore, an open, navigable and comparatively warm sea, of easy access in this direction, and may be entered by any one who has the boldness and determination to attempt it.

In arriving at this conclusion Dr. Petermann has been avowedly influenced by the preposterous fables collected and published a century ago by Daines Barrington; but it is at once met by the very practical objections that the sea east of Spitzbergen, far from being clear of ice, has been at all times covered with very dense pack; that till within the last few years no ship has ever succeeded in sailing along the east side of Spitzbergen; that Gillis Land has not been seen more than half-a-dozen times in two or three hundred years; and that Wiche's Land, discovered in 1617, has never been seen since till about five years ago, when a Swedish ship re-discovered it, and, in ignorance of any former claim, named it King

Karl Land. North of Spitzbergen a still denser pack is found: there are voyagers who say that they might easily have sailed as far as the parallel of 83° had time permitted, though even these admit that it would have been difficult to go beyond that; but to confine ourselves to the simple fact, no ship ever has gone as far as 82° ; for Parry, who in 1827 reached $82^{\circ} 45\text{m.}$ on the meridian of Spitzbergen, the highest north latitude which has yet been attained, did so by sledges, and desisted from the attempt because he found that the ice on which he was travelling was drifting south at very nearly the rate of his march towards the north.

The Swedish expeditions, ranging from 1858-72, were probably in some measure influenced by the theoretical views of Dr. Petermann, but also, perhaps, by the natural desire to force a way northwards from their own harbours; this led them direct to Spitzbergen, and at Spitzbergen and its immediate neighbourhood they remained. Year after year they found the pack to the north of Spitzbergen impenetrable; and the highest latitude reached by Captain von Otter in the "Sofia" in 1868—the highest latitude which a ship has ever reached on that meridian—was $81^{\circ} 42\text{m.}$ These expeditions, then, well fitted, ably commanded, and manned by seamen of the grandest historical reputation, may be considered as having proved that the passage to the North Pole by way of Spitzbergen is, if not impossible, at any rate of a difficulty not yet to be overcome. They have also, by their long and patient surveys round Spitzbergen, largely increased our knowledge of that archipelago, though the dense pack always found to the east has caused the survey in that direction to be left in a very imperfect state; thus, little is known of Gillis Land more than the rough whereabouts: its size, shape, or exact position remains undetermined, and it is doubtful how far it extends to either north or east. Wiche's or King Karl Land has been made out a little more accurately, though still but vaguely; the eastern coast of North-East Land has been seen only from a distance; no ship has ever been near it; the circumnavigation of Spitzbergen, as performed by Captain Carlsen in 1863, in the brig "Jan Mayen," was so far to the eastward as to sight Gillis Land; and though the voyage has been deservedly commemorated, it added nothing to our topographical knowledge. In 1864 three

Norwegian sealers, having also sighted Gillis Land, attempting the same circumnavigation, were caught in the ice, and the crews, taking to their boats, were eventually picked up, after enduring great hardships; they merely confirmed what was known before, that the east coast of North-East Land is bordered by a continuous ice-field.

In 1868 the German flag, for the first time, crossed the Arctic circle. The expedition which carried it there, now known as the First German Expedition, was set on foot principally by Dr. Petermann: with the funds which he collected, and by the exertions of Karl Koldey, an officer in the mercantile marine, a small cutter-rigged vessel was purchased and fitted out at Bergen, from which place she sailed May 24th. The proposed plan was to make the east coast of Greenland in about latitude 75° , and thence to push as far north as possible, but in any case to return to Europe in the autumn. They reached this proposed latitude on June 4, in 7° west longitude, where they met with very heavy pack by which, on the 6th, they were quite surrounded. From the crow's-nest * nothing but ice was to be seen, either to the west or east; all that they could hope for was that the wind might come from the west and break up the pack. But the wind did not come from the west, and they remained for a fortnight closely frozen in, and drifting continually to the southward; when on the 20th they escaped from their difficult position they were in latitude $73^{\circ} 3\text{m. N.}$, longitude $16^{\circ} 9\text{m. W.}$; that is to say, they had been carried to the south and west at the rate of about ten miles a day. Struggling to regain their former latitude, they kept along the edge of the ice which appeared unchanging, everywhere close and impenetrable, whilst the wind continued easterly, as though "nailed" in that quarter; all their endeavours to penetrate to the westward were unavailing, and on the 29th they left the ice and went to Spitzbergen, the South Cape of which they sighted on July 3. They then made a futile attempt to pass up the east coast, but being compelled to return, rested for a few days in Bell Sound, and again went westward to the Greenland pack, along the edge of which they advanced as far as $80^{\circ} 30\text{m. N.}$, where they were in longitude $6^{\circ} 35\text{m. E.}$ From this point they

* A shelter for the look-out aloft; it is described by Commander Markham as a large cask secured at the top-gallant mast-head.

turned south, and by August 3, in latitude $73^{\circ} 19m$. had got as far west as $16^{\circ} 37m$. W.; Cape Hold-with-Hope was in sight, the sea appeared to be clear, and everything seemed to promise that they might at last reach the coast of Greenland. An hour later they found themselves on the edge of the ice-field, with no hope of being able to get through: to the south-west alone could they discern any openings, and with the wind at south-west they could not go in that direction; they did manage to get as far as $17^{\circ} 22m$. W., but there they stopped; with much labour and difficulty they drew themselves clear of the ice, in the disheartening conviction that the main object of the expedition—the exploring of the coast of Greenland from the 75th parallel—had utterly failed. The rest of the short summer they occupied in Spitzbergen waters, and returned home, anchoring at Bergen on September 29, and at Bremerhafen on October 9.

The geographical results of this cruise were thus extremely trifling, and so far as polar exploration was concerned were inappreciable; but Captain Koldewey gained the experience of ice-navigation, and was better prepared to take command the next year of the Second German Expedition.

This was altogether on a larger scale, and though not organized, was very directly countenanced, by the government; the king of Prussia himself subscribed largely to the funds, and came down to Bremen on June 15, 1869, to wish them God speed. Of the two ships composing the expedition, the "Germania," commanded by Captain Koldewey, was a newly-built screw-steamer of 143 tons and 30 horse-power; the "Hansa," commanded by a Captain Hegemann, was a sailing-vessel of 242 tons. Contrary winds detained them on their passage, and they saw the first ice on July 15th in latitude $74^{\circ} 49m$. N., longitude $10^{\circ} 50m$. W.; this lay thickly packed against the coast of Greenland, and effectually barred their progress to the westward. On the 20th, the two vessels were separated in a fog, and did not again meet; the fortune of the expedition therefore bifurcates; at present we follow the "Germania." For several days Captain Koldewey endeavoured to force her through the pack, but without success; it was not till the very end of the month that there appeared a slight tendency of the ice to set to the eastward and so open out, and the "Germania," driven through

under steam, at length reached the coast; on August 5th she anchored in a small bay on the south side of Sabine Island. A party of her officers ascended a hill about two thousand feet high, the better to examine the state of the sea; as far as they could see to the north there was no sign of water, only towards the south and south-east did the ice seem broken. On the 10th they took advantage of an open lane which formed to the east of Shannon Island, and crept north under steam as far as latitude $75^{\circ} 31n$. Here their further progress was stopped; the pack was extremely heavy, and pressed close against the land; there was no possibility of advancing. This impassable barrier continued during the whole time the "Germania" was in that neighbourhood, that is, till well into the following summer; and Koldewey, remarking that Clavering, in 1823, was stopped by a similar barrier in $75^{\circ} 9m$., believes that the ice is checked here by some physical cause, and prevented passing to the south.

Violent north winds in the early part of September did not in any way break up this close pack; by the 13th the ship was again in the little harbour in Sabine Island, and a few days' further experience led them to the conclusion that they must stay there; the thermometer fell to 5° F., and young ice was everywhere forming; they covered the ship in and prepared for the winter. By the end of September the sea was completely frozen over; from the top of a neighbouring hill no water was to be seen; the thick old pack-ice pressed in nearer the coast, but through the whole winter it had an almost continual movement to the south, which stopped only when an exceptional calm was accompanied by exceptional cold.

A sledging-expedition which left the ship on September 14th travelled for four days up a fjord of the mainland, seeing great numbers of musk-oxen and reindeer; on its return, shooting-parties were sent out, and 1,500 lbs. of good beef and venison secured; but the animals disappeared with the sun in the beginning of November. As the winter passed on, violent storms from the north prevented any further operations, and the first long sledging-journey was undertaken on March 24, 1870. The thermometer was then at -20° F., and amidst a succession of northerly gales and heavy snow, the party struggled northwards. On April 15th they reached their

highest latitude, 77° in., and ascending a hill some 1,500 feet high, looked to the north: they saw the coast-line apparently uninterrupted, running nearly due north, as Lambert is said to have seen it two hundred years before; and that was all: beyond the honour of carrying the German flag over the 77th parallel on the east coast of Greenland, they had not attained any wished-for success.

On April 27th they regained the ship, the continuous north wind driving them along as they travelled south, so that their return occupied only half the time of their outward journey. Other sledging and surveying expeditions filled up the time, till on July 11th they cut a passage for themselves with saws, and escaped once more into the open sea. As they cruised to the southward, they lighted on the most interesting discovery of the voyage—a deep inlet, which they have named Kaiser Franz Joseph Fjord: up this they steamed slowly, and after passing through the coast-ice, met with no difficulty; the further in they went the warmer they found both air and water; the scenery was beautiful, of an Alpine character, glaciers, cascades, waterfalls streaming down the sides of the mountains, and far in the distance towered a peak, now marked as Petermann Peak, to the height of twelve thousand feet. They steamed up this wonderful fjord for seventy miles, in a westerly and south-westerly direction, and saw no termination; they would have wished to go further, but one of their boilers gave out; they patched it up so as to be able to steam out, which they had barely done when it finally broke down: its last effort was to force the little steamer out to seaward through the chain of shore-ice. The homeward voyage was made under sail, and on September 11th they arrived at Bremerhafen.

The fortunes of her consort, the "Hansa," had been very different. On August 13th, the coast of Greenland, from Pendulum Island as far as Cape James, was in sight, but that was all; she could not pass the ice that lay between, not altogether on account of the closeness of the pack, but rather that it opened only with a westerly wind, which was opposed to her advance. This was, it will be seen, just a week later than the "Germania" had got through under steam, and there is no reason to doubt that the "Hansa" might also have got through if she had had even auxiliary steam power. Not having that, she was

helpless, and whilst she was seeking a passage westward the ice closed round and hindered her escape to the east. By September 19th her crew had begun to prepare for wintering in the pack. With the patent coal which they had on board, and which indeed formed the principal part of her cargo, they built a hut on the ice, and stored in it provisions for two months; their boats, also they got out, in readiness for the worst that could happen. It was well for them that they were thus prepared. In a violent storm on October 19th, the enormous masses of ice were so pressed against the ship, that whilst her stern stuck fast, her bow was lifted bodily through a height of seventeen feet: the strain was tremendous, and the groaning and creaking of the ship told what she suffered. By this nip she was fatally damaged, and when the storm subsided and she slid back into the water, she was found to be leaking badly. Pumping proved useless; the few men were exhausted, and the pumps froze: the water rose rapidly, and all hope of saving the ship had to be given up. They got out all provisions and stores on to the ice, and made their arrangements as complete as possible. The ship sank on the night of October 21st–22nd, leaving thus fourteen men camped on a large floe. On this they remained for seven months, being, in comparison with possibilities, warm, well-housed, and well-fed, but exposed to continual and extreme danger: their floe gradually broke away; from a circumference of seven miles it was reduced to one of two hundred paces: it finally gave way under their hut. They had by that time drifted southwards into latitude $61^{\circ} 12\text{m.}$, a total distance of 972 miles SW1-2S., and had now fair hopes of reaching Friedrichsthal in their boats, which they eventually did on June 13th.

The "Hansa" had been meant as a store-ship for the "Germania," and though she also had on board a small staff of scientific observers, whose collections were lost with the ship, it is to the results obtained by the "Germania" that we must refer the success of the expedition. Valuable as in many respects are the observations which this ship brought home, so far as the first object is concerned, she added but little to our geographical knowledge. We wish here to speak solely of the results of the expedition in their bearing on polar discovery; the hardships which the sledging-party of the "Germania" endured, the dangers to which the crew of the

"Hansa" were exposed during their eight months on the ice-floe or in the boats, the gallant manner in which they strove against them and conquered them, have a deep and real human interest; but that interest is not geographical, and we are compelled at present to confine ourselves to this. We may then consider the Second German Expedition of 1869-70, in agreement with the first expedition of 1868, with Clavering in 1823, with the shadowy report of Lambert in 1670, and the very definite one of Scoresby in 1822, with the expeditions equipped by Messrs. Gibbs in 1863-64 to search for the lost Icelandic settlement, and with the concurrent testimony of all the Greenland Sea whalers, as presumptively establishing the facts that the east coast of Greenland runs nearly due north on about the 20th meridian of west longitude, as far at least as the 80th parallel; that this coast is pressed against by a permanent ice-field of unusually heavy pack, which prevents all possibility of a ship reaching the coast in a high latitude; that the violent north winds and snow of winter and spring render sledging extremely difficult and dangerous; and that this pack has a continual set towards the south at an average rate of about ten miles a day. Captain Koldewey and his companions, both the officers of the ships and the scientific observers associated with them, have pronounced it as their positive opinion that the pole is not to be reached by way of Greenland;* and making every allowance for the peculiar difficulties by which they were opposed, the possible unusual severity of the seasons, and the inferiority of their equipment, the very small power of the "Germania's" engines, and boilers that gave out after a very few days' steaming, it is still evident that the obstacles which must be met with on that route are most serious, that they cannot be encountered without great hardship and danger, and that the probability of ultimate success is extremely small.

But Dr. Petermann's theory of the influence of the Gulf Stream applies more distinctly to the sea east of Spitzbergen and north of Novaya Zemlya: it is towards this sea that the main body of the current, which passes the North Cape, is directed; it is here, if anywhere, that the influence of the warm water should

be felt far to the north; it is here therefore that, as Dr. Petermann has always maintained, the attempt should be made, and it was here that the attempt was made in 1871, by a very modest expedition consisting of a Norwegian fishing-smack chartered by two Austrian officers, Lieutenant Weyprecht of the Imperial navy, and Lieutenant Payer of the infantry, the last of whom had already some experience of Arctic navigation, having been Koldewey's second in the expedition of 1869-70. One of the principal results of this cruise was the confirmation of the report which had been made by the Norwegian fishermen four years before, that the Kara Sea was navigable in September. Till then it had been considered that this land-surrounded sea was at all times covered with ice; it was known to geographers as the ice-cellar.

Weyprecht and Payer have argued that the recent experience of it is in accordance with theory; for the great rivers Obi and Yenisei, which flow nearly due north through several degrees of latitude, must, during the summer, bring down an enormous quantity of water that has been warmed by a southern sun, and that the necessary effect of this must be to clear the Kara Sea in the autumn: that former observations have been made in August before this agent has had time to produce its effect, and that the ice does not completely give way till towards the middle of September; but that from that time till the middle of October the sea is open. It is quite certain that for these last few years the Kara Sea has been found open in the late autumn, and the explanation which has been given seems satisfactory; but the fact still remains that older observers have not been so fortunate, and that Barentz was frozen up in August and spent the winter, without the possibility of escape, on the north-east side of Novaya Zemlya, at a point directly opposite to the mouth of the Obi, and which ought to have felt any warming influence of the Obi water in a peculiar degree. We may therefore conclude that the seasons vary considerably, and that the river waters are not always capable of producing the effect which the Austrian officers have attributed to them.

Their experience of the sea to the west of Novaya Zemlya seemed to support the original theory which had been so stoutly maintained: they found the water on the surface distinctly warmer than the main

* Proceedings of the Royal Geographical Society, vol. xvi. p. 230.

body of the sea, and they observed that this warmth reached further north towards the end of the season. They found, in fact, in September, clear sea and surface water of a temperature of 40° F., as far north as 79° , in longitude 40° – 50° E.; but this warmth reached a very little way down, and at a depth of fifty or sixty feet they had a temperature of only 32° F. They report that from their extreme position the ice towards the west was thickly packed, but that towards the north it was not so, and that they saw nothing which could stop the advance of a steamer of moderate power; that the locality in this respect differed altogether from Spitzbergen, where, though a ship can go, almost every year, as far north as 81° , the pack then met with is dense, heavy, and impassable, whereas the ice they met with was very different; it was not to be compared with the ice on the east coast of Greenland, for whilst that is piled up in irregular masses, what they saw was, on the contrary, light drift which could not be dangerous to any ship, and the worst that could befall would be a temporary delay. Their voyage, in fact, seemed to them full of promise, and the report of their navigation concludes with the very hopeful sentence, "We do not, of course, say that because we have found the sea free from ice as far north as 79° , any one can therefore go to the pole at the first attempt, and without further difficulty; but all our observations support us in the conviction that a well-equipped and well-officered expedition must necessarily reach a higher latitude in this sea than at any other point; unless indeed the pole is surrounded by a number of islands which will serve as a foundation for the ice."

They go on, however, to speak of signs of land which they met with at their extreme north; more especially of the diminishing depth of water and of eider-geese flying from the north. These were unmistakable, and would, it might have been supposed, have modified their opinion as to the possibility of getting much further north; such, however, was not the case: the officers of the expedition brought back with them to Germany the most rose-coloured hopes of a speedy solution of the great geographical problem, hopes too flattering to the pride of an inland people, ignorant of the peculiar difficulties of Arctic navigation; another expedition was resolved on by, we may almost say, popular acclamation, and the

necessary funds raised at once by popular subscription.

A screw-steamer of 220 tons, named the "Tegetthoff," was fitted out in the Elbe by Lieutenant Weyprecht, and sailed from Bremerhafen on June 13, 1872; calling at Tromsø, she finally started from that place on July 14th. On the 25th, in latitude 74° 15m., they met with their first ice, and it was not without considerable difficulty that they reached Barentz Island, near Cape Nassau, on August 13th. Here they established a *depôt* of provisions and stores, and left on the 21st: the same night they were caught in the ice. On September 9th, the time of year when, according to their former report and the theory which they had deduced from it, they ought to have had open water and the warmest of weather, they were still fast frozen, with a thermometer at 5° F.* On October 5th they were still fast frozen, and saw no prospect of extricating themselves: during these six weeks they had drifted backwards and forwards, now towards the south-west, now towards the north-east, apparently at the caprice of the wind, and with little or no discernible current. The pressure of the ice began to cause them serious alarm; on the 13th it was so great as to lift them several feet, giving them a very considerable heel over to port; the pressure continued; the ice was always in motion, always opening and again closing; but they could never even attempt to get clear, and each movement brought on a new pressure and a new danger. They were thus unable to properly house-in the ship; on the contrary, they kept her deck covered with coals and provisions; the boats were kept on the ice; materials for building huts were got out; the huts were even built, but a movement of the ice destroyed them. The months thus passed away in continued anxiety; they could seldom venture even to take their clothes off, and everything was prepared to enable them to leave the ship at a minute's notice.

During this time the ship drifted more or less steadily to the north-east, and on February 4, 1873, was in 78° 42m. N., 73° 18m. E.: from this point their drift took a new direction and carried them towards the north-west, but still without any possibility of escape: the summer came

* Proceedings of the R. G. S., vol. xix. pp. 17 et seq. *Mittheilungen*, vol. xx. pp. 381, 417, 443.

again, but they remained as before, fast frozen in the pack. On August 30th, being then in $79^{\circ} 43\text{m. N.}$ and $60^{\circ} 23\text{m. E.}$, they sighted land; land till then unknown, apparently stretching away far to the west and north, and which was afterwards called, in honour of the emperor of Austria, Kaiser Franz Joseph Land. Towards this they were slowly set, and in the beginning of November the ice-field in which they were drifted brought up against a small island which they named Wilczek Island, lying to the south of the mainland. Here they were fast frozen, and passed the winter of 1873-74.

In March and April, Lieutenant Payer conducted a sledging-expedition to the northward, and reached the latitude of $82^{\circ} 5\text{m.}$, laying down the coast-line as well as he was able, and as it appears in the latest charts: through the whole of this journey the land was found to be mountainous, covered with snow, and with enormous glaciers; uninhabited, and without signs or traces of any former inhabitants. Bears there were, and seals; and the tracks of hares and foxes were seen: as the summer approached, numbers of auks made their appearance; but the vegetation was most limited; "excepting in the Antarctic regions," is Payer's report, "no country exists on the face of the earth which is poorer in this respect."

This description of it, as the most utterly desolate Arctic land yet discovered, militates strongly against the theory of a milder climate which has been based on the hypothetical action of the water of the warm current which passes the North Cape. It is of course possible that these years, 1872-74, were of exceptional rigour; but the condition of the newly-discovered land does not give evidence to that effect; and Admiral Lutke in 1822-24 found the same impenetrable pack near the coast of Novaya Zemlya, which prevented his rounding Cape Nassau, and which, on the parallel of 76° , stretched away to the westward beyond the meridian of 43°E. : it would thus seem much more probable that it was rather the September of 1871, in which an exceptional warmth had reached into the usually ice-bound sea. Nor can we now say how far the conditions reported as existing in 1871 were real: and fully admitting that where the authors of the report actually were, the water was comparatively open, it may fairly be doubted whether the state of the ice in the dis-

tance was as favourable as they were led to suppose.

But at any rate, the discovery of the land which the signs observed in 1871 clearly foreshadowed, seems to place an almost insuperable obstacle in the way of getting further north in that direction by ship. So far, indeed, as is yet known, the land may be merely a collection of islands, large and small; in which case a sledging-journey from Wilczek Island, on the 80th parallel, might be possible, though difficult and long: but if the land should prove to be continuous, if, that is to say, there is no passage between King Oscar Land and Petermann Land, the attempt in this direction must be considered hopeless; sledging for a great distance over an unknown land of mountains and glaciers may be put down as a practical impossibility.

None the less, the discovery of this land is of great geographical interest, and its further exploration is a problem which will, we may hope, be partially at least solved within the next few years. Amongst the questions which would seem most urgent are the continuity of the land, and its extent towards the west; is the almost mythical Gillis Land, a land rarely seen and never attained, in the approximate position of 82°N. and 35°E. , part of Franz Joseph Land? is it an independent island, or does it join on to King Oscar Land? In this locality the map is still a blank, and it remains to be seen whether Zichy Land, King Oscar Land, and Gillis Land, are parts of the same, or, as the analogy of polar lands would hint at as more probable, three distinct islands. The explorations of the last fifteen years round Spitzbergen, in conjunction with Parry's more celebrated expedition in 1827, may be regarded as establishing as a fact that as far as the 83rd parallel there is no land to the westward of the meridian of 35°E. ; but, on the other hand, it would now appear certain that to the east of that, as far as the meridian of 70°E. , the sea is blocked by a group of islands, at least equal in extent to the Spitzbergen group, but wilder, colder, and more desolate in an extreme degree. Beyond this we as yet know nothing. These questions belong fairly to the country which has already done so much in this direction; and we may hope that the energy and skill of the Austrian officers will work out the problem to a satisfactory conclusion.

As the spring of 1874 advanced, and the

ice which hemmed in the little "Tegetthoff" showed no signs of breaking up, it was determined to abandon the ship and to endeavour to reach Novaya Zemlya by sledge and boat; and to do so at once, in the hope of there falling in with some of the Norwegian fishing-vessels, by which they could return. They accordingly left their ship on May 20th; the task before them being to drag three boats over the ice till they came to open water. This they found a work of extreme difficulty; the way was excessively rugged, the ice piled up in irregular hummocks, and the snow lying deep between; this was covered with a hard-frozen crust, which gave way beneath the men, so that at each step they sank up to the waist; they could thus drag along only one boat at a time, and the distance had to be traversed five times; progress was painfully slow, and with their utmost exertions averaged only half a mile a day.

On June 1st they reached the edge of the fast land-ice, beyond which they could not go; and taking advantage of the delay, a party went back to the ship and brought on a fourth boat. It was not till the 17th that a strong north wind broke up the ice before them so far as to permit them to launch the boats. For weeks they battled with the heavy drift-ice, alternating between the sledges and boats which they dragged over wide fields and launched again when opportunity offered; but it was seldom that they met with water of any extent; the floes were small, and the passages between them crowded with fragments which froze fast together during the night; they were thus constantly delayed by having to load or unload the boats, and by having to wait for favourable changes in the ice. Added to these difficulties came a spell of strong southerly winds, which carried them with the ice bodily back towards the north. On July 15th, after nearly two months of unceasing and most laborious work, they were back in the immediate neighbourhood of Wilczek Island, from which they had started. Fortune then turned in their favour, and a northerly wind began to drive them southwards, and at last, on August 15th, in $77^{\circ} 40\text{m. N.}$ and 61°E. they reached open water: they broke up the sledges, shot their two remaining dogs, Newfoundlands, brought from Vienna, for which they had neither room nor provisions, and took to the boats. The weather continued favourable, and the next day they sighted the high land

of Novaya Zemlya; they passed by their *dépot* on Barentz Island, but having still three weeks' provisions, they thought it best to pass south without delay; on the 24th they fell in with a Russian schooner, and chartered her to take them and their boats to Wardö, where they arrived on September 3rd.

The manner in which the discipline, organization, and health of the men were preserved during this long and perilous voyage, is in itself very high praise to Lieutenant Weyprecht and the officers of the expedition; the fourteen months' drift in the pack, and the more than three months with the sledges, were, throughout, a period of very great danger and of exceeding hardship; and to have passed safely through such a severe trial is ample proof of the splendid quality of the crew, composed principally of Dalmatian sailors, descendants of the old stock of the Gulf of Quarnero, famous in many a medieval adventure. But notwithstanding this, and notwithstanding the geographical value of the discovery of the Franz Joseph Archipelago, we may still doubt how far the voyage of the "Tegetthoff" has furthered the solution of the main problem which has been proposed, the exploration of the polar basin, and the passage to the pole itself. What it has contributed to this has been altogether negative; it has proved that the theory of an open sea between Spitzbergen and Novaya Zemlya is incorrect; it has proved that this sea, which we are glad to see marked on the Admiralty chart by the name of the first who sailed it, Barentz Sea, is blocked with impenetrable pack; and if occasionally open as far as the 79th parallel between the meridians of 40° and 50° , further to the east, more especially from the meridian of 60° to 70° , it is impassable.

The drift of the "Tegetthoff" during these long fourteen months must be considered as in a measure delineating the sweep of the Gulf Stream. It is physically certain that the water continually flowing past the North Cape towards the north-east must have, in some way and in some place, an escape from the polar basin; and it has long been accepted as a geographical fact that this water does circle round and return by the coast of Greenland; this has been proved in various ways, amongst which we may mention the great quantities of drift-wood from the Siberian rivers which are thrown on the north-east coast of Spitzbergen, some of which is also carried into the

current running towards the south between Greenland and Jan Mayen. It might perhaps at first seem that this timber-bearing cold current is merely the escape of the water of the great rivers, Obi, Yenisei, and Lena more especially; but this suggestion is at once negatived by the fact that the water of the current on the coast of Greenland is salt, and in this respect differs but slightly from the water of the Gulf Stream as it passes into Barentz Sea; it is thus evident that whilst the large rivers contribute enormous quantities of drift-wood, their water forms a very small proportion of that which escapes to the south, the greater part of which must, therefore, necessarily be supplied by the Gulf Stream. But whilst this has been very generally admitted, the exact manner in which that great current turns, and above all the cause of its so turning, have been till now a mystery, which the discovery of the Franz Joseph Archipelago partially explains; for it becomes clear that the part of the current which is deflected towards the north by the pressure of the coast of Novaya Zemlya cannot pass in that direction by reason of this new land, against which it continually presses the ice, whether formed in that sea, or washed out of the Kara Sea, or carried down from the interior of Asia by the Obi and Yenisei; it is thus forced to circle back on itself, and being now a body of extremely cold water, presses the pack to the northward against the Franz Joseph Islands and Gillis Land, and to the eastward against Spitzbergen and the coast of Greenland. In this way the Gulf Stream, far from rendering the navigation of these seas easier, is a very direct hindrance; and it is in a great measure to it that we must attribute the dense pack which has hitherto baffled every effort to survey the eastern coasts of Spitzbergen and Greenland, and which — to confine ourselves to familiar names — has turned back Mr. Lamont, Mr. Leigh Smith, or Captain Koldewey, and in 1869 broke up the "Hansa." At the same time, we know that this effect is not produced solely by that part of the Gulf Stream which we are now able to trace; for Parry, on the meridian of 20° E. and in latitude $82^{\circ} 45'$ N., that is, far to the north of the southern shores of Gillis Land or the Franz Joseph Islands, found the ice-field on which he was travelling moving to the south-west at a rate of nearly ten miles a day. This would seem to speak of another branch of the Gulf

Stream which must escape to the north, possibly to the east of the meridian of 80° , and circle in some yet unknown manner round the immediate neighbourhood of the pole.

But though these recent expeditions have thrown a good deal of light on the circulation of the northern waters, and have partly explained the cause of the dense pack which has so long baffled all endeavours to attain a high latitude in the Spitzbergen Sea, the mere fact of the existence of this pack has been for many years familiarly known to all who have studied the subject from a practical rather than from a theoretical point of view. Our leading English geographers have thus maintained that any attempt to reach the North Pole by this route is not likely to meet with success; and the route through Bering's Straits having shown still greater difficulties, and being, besides, so far from our necessary base of operations, the route to the west of Greenland, through Smith's Sound, has by a species of exhaustive process been forced more prominently forward. It is not, of course, merely on this account that this route has been definitely recommended; for on careful examination it is found to possess very distinct advantages, which will be better understood after a short account of the progress which has already been made in that direction.

The very vague account which Baffin had left of his voyage in 1616, and the non-publication of his map, led to his report being generally doubted. After two centuries of incredulity, Ross and Parry retraced his route and established his fame as one of the greatest of our early explorers; but the passage through Smith's Sound appeared to lead so directly away from all promise of a North-West Passage that it was not even examined, and for more than thirty years of arduous exploration, our ships turned to the west through Lancaster Sound. In his summer cruise of 1852, Captain Inglefield first passed into Smith's Sound as far north as $78^{\circ} 35'$, and his report gave rise to the idea that the sea in that direction was comparatively open. In the following year the Americans, who had cordially joined in the search for Sir John Franklin, resolved to examine these unknown coasts, and for that purpose despatched a small vessel, the "Advance," a brigantine of 144 tons, under the command of Dr. Kane. Kane's report has long been before the world.

His ship, inefficiently manned, without discipline or organization, without proper equipment, stores or provisions, was forced by the pressure of the ice into a small bay now known as Rensselaer Harbour, in latitude $78^{\circ} 40m$. There she remained; and her crew, after enduring most terrible and appalling hardships during two successive winters, were at last driven to abandon their ship, and, in sledges and boats, to make their way southward, to the Danish settlement of Upernavik. So far Kane's expedition was unfortunate; but the additions which it made to our geographical knowledge were most remarkable, and as an advance northwards excelled any single voyage since the time of Baffin; that is to say, the coast-line from Rensselaer Harbour as far north as Cape Morton, in latitude $81^{\circ} 10m$., was explored and mapped.

The report of Morton, the steward of the "Advance," who, in company with an Eskimo hunter, alone reached this northernmost cape, has given rise to a good deal of discussion, and the speculations which he permitted himself have been since proved to be incorrect: the statement of fact, however, remains unquestioned. On June 24, 1854, he reached the cape to which his name has been given; the sea was washing against cliffs which rose perpendicularly to a height of two thousand feet, and advance was impossible. He climbed a knoll five hundred feet high, and no ice was in sight; as far as he could discern the sea was open, a swell coming in from the northward and running crosswise, as if with a small eastern set; the wind was due north, strong enough to make white caps, and the surf broke on the rocks below in regular breakers. The sky to the north-west was of dark rain-cloud, ivory gulls were nesting in the rocks above, and out to sea were mollemoke and silver-backed gulls. In the immediate neighbourhood of this cape they killed a bear and her cub; they saw quantities of eider-ducks and large flocks of geese, and the rocks were covered with tern. They seemed to have got into a new climate, and being prevented by the cape from seeing to the north-east, he conceived the idea that he had discovered the "open Polar Sea" which had been so long talked of. His idea was accepted by Kane, was adopted by many geographers, more especially American, and was very distinctly urged as a reason for further exploration by the supporters of the expedition which was fitted out in

1860, under the command of Dr. Hayes, the former surgeon of the "Advance."

The "United States," a schooner of 133 tons, left Boston early in July, and by the end of August was abreast of Cape Alexander. Here she was stopped by heavy pack drifting through Smith's Sound, and a violent gale from the northward drove her back. After several days' vainly struggling with wind and ice, and being dangerously crushed between the heavy flocs, she made good her retreat into Foulkes Bay, in latitude $78^{\circ} 10m$., and there wintered. In a memorable sledging-journey in April and May 1861, Dr. Hayes reached the shores of what is now marked as Lady Franklin Strait, where his further advance was stopped on May 18th by open water. He was unable to cross the strait, and the water-sky* to the north showed that, even if he succeeded in doing so, he could not proceed further. He had, in fact, reached Morton's "open sea;" the land to the east, at a distance of about fifty miles, could not be seen, and he was under the impression that he had reached the shores of a great polar basin. The ice as he returned was rapidly breaking up; and the small party, after running imminent risks from the opening water, got back to the ship on June 3rd. A careful survey was held, and it was decided that in the schooner's crippled state it would be running too great a risk to force her in amongst the ice; they waited therefore till the sea was tolerably clear, left Foulkes Bay on July 13th, and arrived home without further hindrance.

During their stay in Foulkes Bay they had had an ample provision of fresh meat; reindeer were in great numbers, and the crew and their dogs lived plentifully on choice venison. There was no scarcity of animal-life; bears, walrus, hares, foxes, birds, abounded; and a party of natives that settled near kept them amply supplied. The health and spirits of the men were thus excellent throughout; and Hayes has recorded his opinion that a *dépôt*-party might be supported there easily and in comfort, whilst the skins and eider-down which they could collect would go far to pay the expense of the expedition. The shattered state of the schooner, after her rude encounter with the ice in September 1860,

* A water-sky is a bluish tint in the haze near the horizon, reflected from water, and intensified by the partial condensation of vapour; it is opposed to the yellowish white which appears over ice, reflected from the snow-covered surface; this is known as ice-blink.

prevented her venturing further north in the summer of 1861; but the ice of Smith's Sound, as they left in July, did not seem impassable, and a steamer might, it was believed, have gone through without difficulty, whilst beyond there was clear water and a distant water-sky.

The "United States" had not succeeded in getting as far as had been hoped, but the sledging-party had reached the highest latitude then attained on land, and under circumstances which seemed to promise well for further enterprise. Independently, therefore, of the outline of the coast of Grinnell's Land, the results of Hayes' voyage were considered as encouraging as those of Kane's. It was argued that if expeditions such as these, badly manned, poorly equipped, and insufficiently provisioned, could do so much, it was only reasonable to believe that a stout ship, fitted out with all the resources of a great naval power, might accomplish a very great deal more. This was the line of argument taken from the first by Captain (now Admiral) Sherard Osborn, an officer of great experience as an Arctic navigator, and of great ability and research as a practical exponent of Arctic geography. But, as we have already said, the public mind was then averse to further Arctic exploration; and the government, as the official interpreter of public opinion, refused to sanction it; whilst to the scientific world they had a ready and plausible excuse afforded by the very unpractical but nominally scientific letter of Dr. Petermann (February 9, 1865) urging the superiority of the route by Spitzbergen or Novaya Zemlya.*

Such then was the state of things in Europe, when another expedition was fitted out in America. This, if we may use the term, was the very burlesque of a most serious matter. The "Polaris," a paltry river-steamer, till then rejoicing in the name of "Periwinkle," was manned by a promiscuous and polyglot crew of men, women, and children, Americans, Germans, and Eskimos, and commanded by one Hall, who was indeed an earnest and warm-hearted enthusiast, but was neither an officer nor a seaman, and was quite unversed in physical science. Whether we consider the ship, the crew, or the commander, everything connected with this expedition seems most unpromising; and yet this miserable steamer went right through to latitude $82^{\circ} 16'$, a higher latitude than any other ship has

yet attained; and did this, not by overcoming difficulties, but simply because she did not meet with any. From Cape Shackleton on the coast of Greenland, in latitude $73^{\circ} 50'$, to her highest point, she went in five days; and the pack by which she was stopped does not appear to have been heavy. The circumstances under which she turned back have such an important bearing on the possibilities awaiting any future exploration in the same direction, that we feel called on to examine into them more in detail.

On the morning of August 28, 1871, the "Polaris," being then off Cape Fraser, met with some heavy pack, with, however, a passage close in with the land. The sailing-master, Buddington, was anxious to turn at once: "If we go further north," he said, "we shall never come back again." Hall decided that they might go on, and in spite of Buddington's opposition, they did go on. After a few hours' steaming they came into comparatively open water, and for 150 miles further, till they came into Robeson Channel, saw very little ice; the snow had completely disappeared from the land, and except for the absence of trees, they might have fancied themselves in the temperate zone. Robeson Channel was found to be blocked with ice, some of which was much marked with earth and mixed with stones, a proof that it had floated off land or shoals to the northward; but though at the time densely packed in the channel, it needed only a strong north or north-east wind to break it up. A water-sky to the north told with certainty that the obstacle was of no great magnitude, and Hall, with some of the officers, was anxious to shelter for a few days in the nearest bay, and wait for the channel to clear. Buddington, on the other hand, was bent on returning; his one idea seems to have been that every movement forward would make it more difficult to get back; and whilst they were arguing the point the ship was caught in the pack and frozen in. She was thus drifted towards the south for a distance of about fifty miles; and when the prevailing north wind freshened into a violent gale and broke up the ice, they steamed to the eastward and took refuge in a small bend of the coast, which an iceberg, grounded in front of it, had converted into a harbour. This was on September 1st. The gale had nearly cleared Robeson Channel, and nothing prevented a new advance, which Hall was eager to attempt; but Buddington

* Proceedings of the R. G. S., vol. ix. pp. 42, 90.

positively refused to stir, and the ship remained for the winter in the anchorage, to which they gave the name of Thank God Harbour.

Hall, whose enthusiasm to some extent compensated for his want of knowledge, died, after a few days' illness, on November 8th, and his death broke up the very feeble bond of discipline which had kept the expedition together. Buddington, an old whaling-skipper, without zeal, intelligence, or spirit of enterprise, neither knew nor cared anything about the objects in view; a voyage which carried him so far beyond the routine of his experience was too much for his nerves or his understanding. He attempted nothing during the winter; the provisions and fuel were squandered; and when spring came the adventurers were not in a condition, even had their will been the best in the world, to undertake anything further. The individual members of the crew seem to have considered themselves on a footing of perfect equality; as Admiral Osborn has happily described it, there were amongst them more captains than seamen; and the time passed away in squabbles, which continued after their return to America, and gave rise to a series of reports of the most contradictory nature. Out of all these, however, the main fact stands prominently forward: under circumstances externally most favourable, nothing was done.

During the greater part of the winter the ice immediately round the ship was more or less open; in the end of November a gale from the north-east broke the ship out of her harbour, and owing, it would appear, to the incompetency of the master and the disorderly conduct of the men, drove her against the iceberg, placing her for a time in a position of very great danger. But this same north-east wind drove all the ice to the southward, though of course new ice formed immediately. In February (1872), after a similar storm, all the ice disappeared, and a water-sky was seen to the north. It was not till March that the ice really became firm, and it continued so only for two months; in May it broke up again.

On August 12th they left their anchorage, and being beset in latitude $80^{\circ} 2m.$, were carried down by the current into Baffin's Bay. On October 15th they were again caught in the ice off Whale Sound, and the ship was nipped so severely that it was not expected she would ever float again. Whilst they were making preparations to abandon

her, the ice parted. Although badly crushed, the ship did float, and under the grossest mismanagement, drifted away, leaving the boats and a mob of eighteen, men, women, and children, on the ice. These remained on the ice, and were drifted on it, from latitude $77^{\circ} 53m.$ to $53^{\circ} 35m.$, in the vicinity of Wolf Island, where, on April 30, 1873, they were picked up by the "Tigress," an American sealer, after a miserable drift of 1,700 miles, the longest on record. The ship, meantime, in some unexplained way, got back nearly thirty miles to the north, and was run ashore at Lyttelton Island, where the remainder of the crew wintered. On June 4th they left in boats which they had built out of the wreck of the "Polaris," and were picked up by a Dundee whaler, not far from Cape York.

The only result of the expedition is thus a partial confirmation of the inferences which had been drawn from the previous voyages by Kane and Hayes. On the land adjoining Polaris Bay twenty-six musk-oxen were killed; reindeer abounded; hares, geese, ducks, birds of various sorts were seen in great numbers: these went north in the spring, and as open water and land are necessities of their lives, the necessary conclusion is that they find them where they go to. But the most wonderful account from Polaris Bay is of the vegetation: as compared with all other Arctic records, it seems to have been almost rich; there were many flowers, of different sorts and colours; heath grew in great bushes, to a height of three feet; sorrel was plentiful, grass luxuriant; and though the observations are imperfect, the evidence, such as it is, is that the mean winter temperature was some 20° higher than in Rensselaer Bay. No inhabitants were met with; but the fragments of a sledge, a knife-handle, and the clearly marked position of an encampment attested their former presence.

All these indications have an important geographical bearing. It has been often maintained that the climate towards the pole becomes less rigorous, that, in fact, the neighbourhood of the pole enjoys a pleasant and temperate warmth, due to the long summer day. Such a view seems to us utterly unfounded; and we know that on the east coast of Greenland, or at Spitzbergen, or towards Franz Joseph Land, nothing has been met with to support the theory, which we would condemn as equally false to geographical observation and mathematical

reasoning. Whatever difference of temperature exists between different places on the same parallel of latitude is due to the special geographical circumstances; thus in the interior of Africa the line of greatest heat is, in summer, carried far to the north by the influence of the Sahara; and in the North Atlantic, the lines of equal temperature (isotherms) very markedly follow the course of the Gulf Stream from the banks of Newfoundland to the North Cape. In all parts of the world of which we have sufficient knowledge, the temperature is found to depend on local conditions — the nature of the soil, the prevailing winds, the adjacent currents, rather than on the latitude; and any speculations as to the temperature in a region so utterly unknown as the neighbourhood of the North Pole are unworthy of serious attention.

But we have seen that the Gulf Stream, which passes into Barentz Sea as a comparatively warm body of water, and does, to some extent, mitigate the climatic rigour of the parts adjacent, is yet quite unable to clear away the ice a few degrees further north, and, in fact, by packing the ice against the island barrier, prevents navigation and increases the cold. Wherever ice is accumulated in this way the climate must be made more severe; where, on the other hand, the ice is persistently driven away, is prevented from permanently lodging, the climate will be milder. There is another point too, the importance of which has been perhaps underrated, although Wrangell called attention to it some fifty years ago. Water, as it changes into ice, gives out a very considerable quantity of so-called latent heat, and when this change is on a very large scale, the effect of this heat may be appreciable; conversely, when it changes back into water, it absorbs heat, and this also, when on a large scale, may produce a very noticeable climatic effect. If then, from any locality, the ice is continually swept away, so that, during the winter, new ice is continually forming, which, during the summer, thaws elsewhere, the climate is, in both ways, benefited; whilst the place to which that ice is carried, where it accumulates, and where, in its season, it thaws, is comparatively deteriorated. In this way we may partly explain the very great difference which is observed between the west and east coasts of Spitzbergen; for, as we have already explained, the set towards the south-west accumulates the

ice against the north and east shores, whilst from the west, the same set carries the ice away, to pack it against the coast of Greenland. And in a similar manner we may conclude that the climate of any Arctic coast will be more or less rigorous according as the prevailing winds blow, or the current sets to or from it.

It is, for instance, well established that on the east side of Baffin's Bay a feeble current, which sweeps round the south end of Greenland from the east, sets towards the north; this is finally stopped by the great promontory which closes in to form Smith's Sound; it turns to the west, and falls into the main southerly set of Baffin's Bay. But in doing so it tends to form dead water, to carry the ice into Melville Bay, and to leave it there. Melville Bay is thus notorious amongst Arctic voyagers for its persistent pack; the land-ice is unbroken, and bergs of enormous size grounding in one hundred fathoms, form a nucleus round which other ice collects. With a southerly wind the condition of this is at its worst, and it was here that Sir Leopold McClintock, in the "Fox," was caught in August 1857. On the other hand, the great current of Baffin's Bay runs slowly but steadily to the southward, thus sweeping away the ice from the extreme north of the bay and the entrance to Smith's Sound, and leaving what is known to whalers as the North Water, open always during the summer, and seldom solidly frozen even in the depth of winter.

A glance at the chart will show that the coast, north of Smith's Sound, from Cape Inglefield to Dallas Bay, is, by its formation, a perfect trap for drifting ice; the current which sets through Kennedy Channel jams against it a great part of the ice which it is carrying south; and whilst further west the stream through Smith's Sound takes it on across the North Water to join the pack of Baffin's Bay, along this southern shore of Kane's Sea it is persistently held. Rensselaer Harbour, in the middle of this coast, may thus well have a severe climate, a climate, independent of the latitude, much more severe than Port Foules, only thirty miles distant. When we attempt to examine the conditions further north, we are at once checked by the insufficiency of our topographical knowledge. We can understand that a current, said to run at a rate of from one to two miles an hour, must be an important agent in

scouring the ice out of Kennedy Channel and in great measure from Hall's Basin; but the reports from the "Polaris" seem to show that the greater part of the heavy ice which is swept southwards through Robeson Channel does not come to Kennedy Channel at all; and it is conjectured by Dr. Bessels, the naturalist of the expedition, that this ice is forced to the westward through a large strait, Lady Franklin Strait, of which as yet we know only the opening, and which was believed by Hayes to be a close bay.

That the ice in Robeson Channel does occasionally consist of heavy floes is on evidence from the "Polaris;" but the water-sky constantly seen to the north, and more especially after a northerly gale, would seem to prove that the main polar pack, that heavy impenetrable pack which presses down to the north of Spitzbergen, over which the ice-blink is permanent, has not free access to the yet shadowy Lincoln Basin. This would point to a continuation of the land, in some form or other, far to the north, on the east as well as on the west side of the passage; although Morton, a man of many years' experience in Arctic voyages, says that from the northernmost position of the "Polaris" no land was visible to the north-east, and that what is marked on the chart as land seen was a bank of cloud. Whether this was the case or not, we do not pretend to say. Morton's genius, perhaps, lies in discovering "open polar seas;" and the fact of Lincoln Basin being comparatively clear is strong presumptive evidence that it is also comparatively closed, although indubitably not quite so, as is proved by the constant strong current through Robeson Channel. Wherever there is a continual current there must be a continual supply of water; a simple fact which leads directly to one of the great physical problems, the solution of which is eagerly looked for.

Now drift-wood was found carried by the current through Robeson Channel: this is said to have been pine. The Eskimos speak of plenty of such wood being washed up on the shores of Grinnell Land; though the word plenty is probably to be considered as the comparative of none at all. This wood, coming from the north, certainly did not grow there; it must therefore have been first carried there, and that, necessarily, from the great rivers either of Siberia or of North America. These, on each side, bring down an enormous quantity of drift-wood,

mostly pine; vast heaps of which have been observed on the north-east coast of Spitzbergen, and on the American coast near Point Barrow.

The water which enters the polar basin through Bering's Straits is quite insignificant: Bering's Straits are only fifty miles wide, and their greatest depth is less than thirty fathoms; and even of this small passage only a part is occupied by the in-going current. On the west side there is an outward drift of cold water, making a curious climatic difference between the two coasts, which is perhaps most marked between Norton Sound on the east and the Gulf of Anadyr on the west. It is impossible to suppose that the very small quantity of water which enters through Bering's Straits can have much effect: it may assist in rendering the passage round Point Barrow, and as far as Banks' Land, occasionally navigable; but its influence is certainly extremely small; for in fact, the whole sea to the north of Point Barrow and to the west of Banks' Land is blocked by the most massive and remarkable ice-field which exists anywhere in the Arctic regions; and which differs in an extreme degree from pack as it is known in Baffin's Bay, or from the much heavier pack on the east coast of Greenland or to the north of Spitzbergen.

Arguing from the permanent existence and position of this "glacier-like mass," which no wind drives off shore more than a mile or two, and which never surges down towards the Atlantic, Admiral Osborn, in a masterly and practical paper* on Arctic geography, has maintained that it must be hemmed in by land to the north, and that Kellett's Land on the west, Grinnell's or Grant's Land on the east, are possibly parts of this barrier. We have already expressed our sense of the little value which can be attached to mere speculative geography; but Admiral Osborn's practical arguments can scarcely be classed as theoretical speculations; and whether the land exists or not, it is quite certain that the mountainous ice-field does. Whatever holds it there, it alone must prevent the drift-wood of the Mackenzie passing to the far north; and the necessary conclusion is that that drift-wood, which has been found in Robeson Channel and on the shores of Grinnell's Land, does not come from the American rivers. It must

* Proceedings of the R. G. S., vol. xvii. pp. 175, et seq.

therefore come from the rivers of Siberia, and argues a distinct connection with the sea which washes the Siberian coast. According to this view, the water which runs south through Robeson Channel is supplied by the Gulf Stream, a considerable portion of which, passing to the eastward north of Novaya Zemlya, circles across the polar basin and returns to the Atlantic by the east and west coasts of Greenland.

It has been often maintained that the water which thus escapes to the south is supplied in great part by a system of under-currents flowing north out of the Atlantic. This is a piece of hypothetical geography which has no sufficient basis of fact to rest on. So far as Baffin's Bay is concerned it may be positively denied. Commander Markham mentions distinctly that in several soundings which he secured, the low bottom-temperature in Baffin's Bay showed that the warm under-current had no existence. But it has been said, that the warm salt water meeting with the cold, comparatively fresh water of the Arctic, sinks below it, dives underneath it, flows to the north as a warm under-current, and then coming to the surface, still warm, keeps open the Polar Sea. We have never seen an explanation of its coming to the surface, nor any comparison of saltness which would account for this wonderful dive. Great weight has been laid on the observations reported by Mr. Leigh Smith in his voyage of 1872, which showed a singularly high bottom-temperature, ranging indeed up to 64° F., with a surface-temperature of 30°. We do not for a moment doubt the perfect good faith of these reports; but we do most distinctly doubt their correctness; we would a great deal rather believe that the thermometers were out of order, or were used without the necessary precautions, than that any such anomaly occurred in nature. We know with fair accuracy and within well-established limits the temperatures of the water at the several points of a section reaching, we may say, from Bergen to Cape Farewell, and throughout this section there is no temperature at all approaching 64°. It is therefore in the highest degree improbable that any such temperature can be at the parallel of 81°, whether at the surface or at the reported depth of 600 fathoms. The same argument does not of course hold against the reported bottom-temperature of 40° or thereabouts; on this point we feel much more doubtful; and

whilst we are far from implicitly accepting it, we would willingly recognize it as one on which we ought to have more exact information. The right understanding of ocean-currents is a branch of science which has yet to be worked out; although appertaining strictly to physical geography, it has too long been handed over to professors of abstract science, who claim to expound its difficulties without even an elementary acquaintance with its facts. The solution of its many interesting and important problems is not to be gained without long-continued and careful observation in different and distant parts of the sea; and towards this solution we may hope for most valuable aid, when, within the next few years, the deep-sea survey of the "Challenger" expedition can be fairly collated with that which we may hope to receive from the polar regions.

Not less interesting and still more important in their bearings on scientific navigation are the meteorological problems on which some light may be thrown by an insight into the geography of the polar basin. Several eminent meteorologists have maintained that the south-west and southerly winds which prevail, during the winter, over a large part of Siberia, are a presumptive proof of the existence of an open polar sea, of a place where the atmosphere is warmer, moister, and less dense, towards which the Siberian air aspires. The argument seems to us to prove too much: if this condition existed in the neighbourhood of the pole, able to produce the effects attributed to it, the air ought to aspire towards it, not only from Northern Siberia, but from the entire boundary of the polar area, from the Greenland Sea and from the archipelago north of America—from Smith's Sound on the east to Melville Island on the west. This is, however, not the case. Through 120° of longitude west from the meridian of Greenwich, the winter winds of the Arctic region are very distinctly from the north; they blow from the hypothetical centre of aspiration. Are they then connected with the southerly winds of Siberia? The polar map will correct any confusion which a Mercator's chart may have originated. A southerly wind in Siberia will, if continued in a straight line, appear in the American archipelago as a northerly wind; and it is difficult to avoid the suggestion that the northerly winds with which, from Parry's voyages to the voyages of Kane, Hayes, Hall, or Koldewey, all records of

Arctic exploration make us familiar, are, in some way, the prolongation of the Siberian southerly winds; are, in fact, winds of propulsion, not of aspiration.

To dwell at greater length on these and kindred problems, for which the voice of science calls for a solution, would lead us beyond the scope of this article, or the domain of this review: we can only mention the bare names of some of the more important of them; such as pendulum-experiments for determining the attractive force exercised by the earth; the measurement of an arc of the meridian for determining more exactly the figure, that is, the shape, of the earth; the magnetic observations, which in the neighbourhood of, and in different positions with regard to, the magnetic pole, have a most direct and even mercantile value, as leading to a more certain knowledge of the eccentricities developed by the compass; or the geological researches amongst the deposits of an age when tropical ferns and evergreen shrubs flourished in warmth and genial daylight, where now we have seas and mountains of snow or ice, and a winter's night of many months' duration.

The account which we have here given of the results of recent Arctic voyages, and of the hopes and requirements of future expeditions, has referred almost exclusively to the progress of geographical and general science. It would have been easy to have given, instead, a soul-thrilling record of dangers and hardships which have been dared, endured, and overcome; a record which would speak to the inmost heart of every reader, as a record of courage, of duty, and of manly virtue. We have preferred, rather, by a consistent train of argument to lead up to the proposition, which many even now do not appreciate, that it is no thirst for a new sensation which has induced our scientific societies to urge on the government the advisability of the expedition now fitting out, and that it is no vain panting for glory which has crowded the Admiralty lists with anxious volunteers; but, on the one side, the desire for knowledge, which is the aim and end of these societies; on the other, the outburst of the same energy and zeal which has maintained the honour of England's flag in so many arduous undertakings.

The report of the Admiralty Arctic committee has given, in detail, the proposed scheme of this expedition. Two screw-steamers, "Alert" and "Discovery," each of about seven hundred tons

and one hundred horse-power, will leave in the latter part of May or the beginning of June, under the command of Captain George Nares, an officer well known in the service as a scientific surveyor, and who, as a mate, twenty years ago, gained his experience in Arctic navigation under Captain Kellett and Sir Edward Belcher. These ships will proceed through Smith's Sound, with the intention of reaching, if possible, the latitude of 81° or 82° ; there one of them will remain as a point of support in case of need; the other will advance as far north as circumstances will permit; but it is not wished that she should winter at a greater distance from her consort than two hundred miles: if, during the open season, she should be able to go beyond this distance, she is, if possible, to return within it. It is thus scarcely contemplated that either of the ships will reach the pole, but it is hoped that, with a moderately favourable season, the advanced ship may attain such a high latitude as to leave the distance to be accomplished by sledges within practicable limits.

A relieving-ship will leave England in 1877, so as to arrive at Lyttelton Island by the end of August, and will there await the return of the expedition, or act in accordance with instructions left there by Captain Nares. This, conjoined with a detailed system of *dépôts*, will, it is believed, provide a safe retreat, should circumstances render it necessary to abandon the ships; and, whilst it is now intended that they should return by the autumn of 1877, we may feel a reasonable degree of certainty that the men, at least, will return by the autumn of 1878. The fortune of the expedition is in the womb of futurity; its complete success will depend on circumstances beyond human control; but after all, the pole is only a sign of the end; and where the whole region, east, or west, or north, is so utterly unknown, it is scarcely to be doubted but that important discoveries will be made, discoveries not only in geography or geology, but in the practical and useful though perhaps less popular sciences of meteorology and magnetism.

Of the non-official books, whose titles we have placed at the head of this article, Mr. Blake's "Expedition of the 'Polaris'" is little more than Mr. Tyson's view of the squabbles of the party, and, though not without interest, has no pretensions to be considered as a scientific record. The history of the German expedition is most drearily drawn out with

accounts of the commonplace details of life on board ship, written in the first instance for an inland German public, and rendered into English by a translator grotesquely ignorant of nautical technicalities. The recent volumes of the proceedings of the Geographical Society, or of Dr. Petermann's *Mittheilungen* contain much more satisfactory accounts of what has been done of late years towards Arctic exploration; not only by Americans or North-Germans, but by Swedes, Norwegians, and Austrians; the whole subject has been worked up by Mr. Clements Markham in an interesting and very readable volume, "The Threshold of the Unknown Region," which we are glad to see has already reached a third edition; and his cousin, Commander Albert Markham, who will serve in the present expedition under Captain Nares, has given us a very pleasant narrative of his experience of a whaling-voyage in the summer of 1873, in a book which has at this time a more distinct value, as showing the extreme change which steam has introduced into Arctic navigation. When we read how this whaler, in the ordinary course of her summer fishing, visited and returned from the positions which Ross, Parry, and Franklin attained only after years of exceptional toil and hardship, we are led to the conclusion which Admiral Osborn has expressed, "that steam-power has robbed the navigation of those regions of nearly all its difficulties and much of its risk." It is this conclusion which gives us so much hope in the present expedition; a hope, supported and strengthened by our knowledge of the wisdom and experience of the distinguished committee to whom the equipment has been entrusted, and in no less degree, by our confidence in the ability and skill of the officer who commands it.

From The Cornhill Magazine.
THREE FEATHERS.

CHAPTER XXXIII.
SOME OLD FRIENDS.

WHEN they heard that Wenna was coming down the road they left Mr. Roscorla alone; lovers like to have their meetings and partings unobserved.

She went into the room, pale and yet firm — there was even a sense of gladness in her heart that now she must know the

worst. What would he say? How would he receive her? She knew that she was at his mercy.

Well, Mr. Roscorla at this moment was angry enough, for he had been deceived and trifled with in his absence, but he was also anxious, and his anxiety caused him to conceal his anger. He came forward to her with quite a pleasant look on his face; he kissed her and said —

"Why, now, Wenna, how frightened you seem! Did you think I was going to scold you? No, no, no — I hope there is no necessity for that. I am not unreasonable, or over-exacting, as a younger man might be; I can make allowances. Of course I can't say I liked what you told me, when I first heard of it: but then I reasoned with myself; I thought of your lonely position; of the natural liking a girl has for the attention of a young man; of the possibility of any one going thoughtlessly wrong. And really I see no great harm done. A passing fancy — that is all."

"Oh, I hope that is so!" she cried suddenly, with a pathetic earnestness of appeal. "It is so good of you, so generous of you to speak like that!"

For the first time she ventured to raise her eyes to his face. They were full of gratitude. Mr. Roscorla complimented himself on his knowledge of women; a younger man would have flown into a fury.

"Oh dear, yes, Wenna!" he said lightly, "I suppose all girls have their fancies stray a little bit from time to time; but is there any harm done? None whatever! There is nothing like marriage to fix the affections, as I hope you will discover ere long — the sooner the better, indeed. Now we will dismiss all those unpleasant matters we have been writing about."

"Then you do forgive me? You are not really angry with me?" she said; and then, finding a welcome assurance in his face, she gratefully took his hand and touched it with her lips.

This little act of graceful submission quite conquered Mr. Roscorla, and definitely removed all lingering traces of anger from his heart. He was no longer acting clemency when he said — with a slight blush on his forehead: —

"You know, Wenna, I have not been free from blame either. That letter — it was merely a piece of thoughtless anger; but still it was very kind of you to consider it cancelled and withdrawn when I asked you. Well, I was in a bad temper

at that time. You cannot look at things so philosophically when you are far away from home; you feel yourself so hopeless; and you think you are being unfairly — However, not another word! Come, let us talk of all your affairs, and all the work you have done since I left."

It was a natural invitation; and yet it revealed in a moment the hollowness of the apparent reconciliation between them. What chance of mutual confidence could there be between these two?

He asked Wenna if she had been busy in his absence; and the thought immediately occurred to him that she had had at least sufficient leisure to go walking about with young Trelyon.

He asked her about the Sewing-Club; and she stumbled into the admission that Mr. Trelyon had presented that association with six sewing-machines.

Always Trelyon—always the recurrence of that uneasy consciousness of past events, which divided these two as completely as the Atlantic had done. It was a strange meeting, after that long absence.

"It is a curious thing," he said, rather desperately, "how marriage makes a husband and wife sure of each other. Anxiety is all over then. We have near us, out in Jamaica, several men whose wives and families are here in England; and they accept their exile there as an ordinary commercial necessity. But then they put their whole minds into their work; for they know that when they return to England they will find their wives and families just as they left them. Of course, in the majority of cases, the married men there have taken their wives out with them. Do you fear a long sea-voyage, Wenna?"

"I don't know," she said, rather startled.

"You ought to be a good sailor, you know."

She said nothing to that: she was looking down, dreading what was coming.

"I am sure you must be a good sailor. I have heard of many of your boating-adventures. Weren't you rather fond, some years ago, of going out at night with the Lundy pilots?"

"I have never gone a long voyage in a large vessel," Wenna said, rather faintly.

"But if there was any reasonable object to be gained, an ordinary sea-voyage would not frighten you?"

"Perhaps not."

"And they have really very good steamers going to the West Indies."

"Oh, indeed."

"First-rate! You get a most comfortable cabin."

"I thought you rather—in your description of it—in your first letter—"

"Oh," said he, hurriedly and lightly (for he had been claiming sympathy on account of the discomfort of his voyage out), "perhaps I made a little too much of that. Besides, I did not make a proper choice in time. One gains experience in such matters. Now, if you were going out to Jamaica, I should see that you had every comfort."

"But you don't wish me to go out to Jamaica?" she said, almost retreating from him.

"Well," said he, with a smile, for his only object at present was to familiarize her with the idea, "I don't particularly wish it, unless the project seemed a good one to you. You see, Wenna, I find that my stay there must be longer than I expected. When I went out at first the intention of my partners and myself was that I should merely be on the spot to help our manager by agreeing his accounts at the moment, and undertaking a lot of work of that sort, which otherwise would have consumed time in correspondence. I was merely to see the whole thing well started, and then return. But now I find that my superintendence may be needed there for a long while. Just when everything promises so well, I should not like to imperil all our chances simply for a year or two."

"Oh, no, of course not," Wenna said: she had no objection to his remaining in Jamaica for a year or two longer than he had intended.

"That being so," he continued, "it occurred to me that perhaps you might consent to our marriage before I leave England again; and that, indeed, you might even make up your mind to try a trip to Jamaica. Of course we should have considerable spells of holiday, if you thought it was worth while coming home for a short time. I assure you, you would find the place delightful—far more delightful than anything I told you in my letters, for I'm not very good at describing things. And there is a fair amount of society."

He did not prefer the request in an impassioned manner. On the contrary, he merely felt that he was satisfying himself by carrying out an intention he had

formed on his voyage home. If, he had said to himself, Wenna and he became friends, he would at least suggest to her that she might put an end to all further suspense and anxiety by at once marrying him and accompanying him to Jamaica.

"What do you say?" he said with a friendly smile. "Or have I frightened you too much? Well, let us drop the subject altogether for the present."

Wenna breathed again.

"Yes," said he, good-naturedly, "you can think over it. In the mean time do not harass yourself about that or anything else. You know, I have come home to spend a holiday."

"And won't you come and see the others?" said Wenna, rising, with a glad look of relief on her face.

"Oh yes, if you like," he said; and then he stopped short, and an angry gleam shot into his eyes.

"Wenna, who gave you that ring?"

"Oh, Mabyndid," was the frank reply; but all the same Wenna blushed hotly, for that matter of the emerald ring had not been touched upon.

"Mabyndid?" he repeated, somewhat suspiciously. "She must have been in a generous mood."

"When you know Mabyndid as well as I do, you will find out that she always is," said Miss Wenna, quite cheerfully; she was indeed in the best of spirits to find that this dreaded interview had not been so very frightful after all, and that she had done no mortal injury to one who had placed his happiness in her hands.

When Mr. Roscorla, some time after, set out to walk by himself up to Basset Cottage, whither his luggage had been sent before him, he felt a little tired. He was not accustomed to violent emotions; and that morning he had gone through a good deal. His anger and anxiety had for long been fighting for mastery; and both had reached their climax that morning. On the one hand, he wished to avenge himself for the insult paid him, and to show that he was not to be trifled with; on the other hand, his anxiety lest he should be unable to make up matters with Wenna, led him to put an unusual value upon her. What was the result, now that he had definitely won her back to himself? What was the sentiment that followed on these jarring emotions of the morning?

To tell the truth, a little disappointment. Wenna was not looking her best when she entered the room; even now

he remembered that the pale face rather shocked him. She was more — insignificant, perhaps, is the best word — than he had expected. Now that he had got back the prize which he thought he had lost, it did not seem to him, after all, to be so wonderful.

And in this mood he went up and walked into the pretty little cottage which had once been his home. "What?" he said to himself, looking in amazement at the small old-fashioned parlour, and at the still smaller study, filled with books, "is it possible that I ever proposed to myself to live and die in a hole like this? — my only companion a cantankerous old fool of a woman, my only occupation reading the newspapers, my only society the good folks of the inn?"

He thanked God he had escaped. His knocking about the world for a bit had opened up his mind. The possibility of his having in time a handsome income had let in upon him many new and daring ambitions.

His housekeeper, having expressed her grief that she had just posted some letters to him, not knowing that he was returning to England, brought in a number of small passbooks and a large sheet of blue paper.

"If yū bain't too tired, zor, vor to look over the accounts, 'tis all theear but the pultry that Mr. —"

"Good heavens, Mrs. Cornish!" said he, "do you think I am going to look over a lot of grocers' bills?"

Mrs. Cornish not only hinted in very plain language that her master had been at one time particular enough about grocers' bills, and all other bills, however trifling, but further proceeded to give him a full and minute account of the various incidental expenses to which she had been put through young Penny Luke having broken a window by flinging a stone from the road; through the cat having knocked down the best tea-pot; through the pig having got out of its sty, gone mad, and smashed a cucumber-frame; and so forth, and so forth. In desperation, Mr. Roscorla got up, put on his hat, and went outside, leaving her at once astonished and indignant by his want of interest in what at one time had been his only care.

Was this, then, the place in which he had chosen to spend the rest of his life, without change, without movement, without interest? It seemed to him at the moment a living tomb. There was not a human being within sight. Far away out

there lay the grey-blue sea — a plain without a speck on it. The great black crags at the mouth of the harbour were voiceless and sterile ; could anything have been more bleak than the bare uplands on which the pale sun of an English October was shining ? The quiet crushed him ; there was not a nigger near to swear at ; nor could he, at the impulse of a moment, get on horseback and ride over to the busy and interesting and picturesque scene supplied by his faithful coolies at work.

What was he to do on this very first day in England, for example ? Unpack his luggage, in which were some curiosities he had brought home for Wenna ? — there was too much trouble in that. Walk about the garden and smoke a pipe as had been his wont ? — he had got emancipated from these delights of dotage. Attack his grocers' bills ? — he swore by all his gods that he would have nothing to do with the price of candles and cheese now or at any future time. The return of the exile to his native land had already produced a feeling of deep disappointment ; when he married, he said to himself, he would take very good care not to sink into an oyster-like life in Eglosilyan.

About a couple of hours after, however, he was reminded that Eglosilyan had its small measure of society, by the receipt of a letter from Mrs. Trelyon, who said she had just heard of his arrival, and hastened to ask him whether he would dine at the Hall, not next evening, but the following one, to meet two old friends of his, General and Lady Weekes, who were there on a brief visit.

"And I have written to ask Miss Rosewarne," Mrs. Trelyon continued, "to spare us the same evening, so that we hope to have you both. Perhaps you will kindly add your entreaties to mine."

The friendly intention of this postscript was evident ; and yet it did not seem to please Mr. Roscorla. This Sir Percy Weekes had been a friend of his father's ; and when the younger Roscorla was a young man about town, Lady Weekes had been very kind to him, and had nearly got him married once or twice. There was a great contrast between those days and these. He hoped the old general would not be tempted to come and visit him at Basset Cottage.

"Oh, Wenna," said he, carelessly, to her next morning, "Mrs. Trelyon told me she had asked you to go up there to-morrow evening."

"Yes," Wenna said, looking rather uncomfortable. Then she added, quickly, "Would it displease you if I did not go ? I ought to be at a children's party at Mr. Trehwella's."

This was precisely what Mr. Roscorla wanted ; but he said —

"You must not be shy, Wenna. However, please yourself ; you need have no fear of vexing me. But I must go ; for the Weekeses are old friends of mine."

"They stayed at the inn two or three days in May last," said Wenna, innocently. "They came here by chance and found Mrs. Trelyon from home."

Mr. Roscorla seemed startled.

"Oh," said he. "Did they — did they — ask for me ?"

"Yes, I believe they did," Wenna said.

"Then you told them," said Mr. Roscorla, with a pleasant smile, "you told them, of course, why you were the best person in the world to give them information about me ?"

"Oh, dear, no," said Wenna, blushing hotly, "they spoke to Jennifer."

Mr. Roscorla felt himself rebuked. It was George Rosewarne's express wish that his daughters should not be approached by strangers visiting the inn as if they were officially connected with the place : Mr. Roscorla should have remembered that inquiries would be made of a servant.

But, as it happened, Sir Percy and his wife had really made the acquaintance of both Wenna and Mabyn on their chance visit to Eglosilyan ; and it was of these two girls they were speaking when Mr. Roscorla was announced in Mrs. Trelyon's drawing-room the following evening. The thin, wiry, white-moustached old man, who had wonderfully bright eyes and a great vivacity of spirits for a veteran of seventy-four, was standing in front of the fire, and declaring to everybody that two such well-accomplished, smart, talkative, and lady-like young women he had never met with in his life.

"What did you say the name was, my dear Mrs. Trelyon ? Rosewarne, eh ? — Rosewarne ? A good old Cornish name — as good as yours, Roscorla. So they're called Rosewarne — Gad, if her ladyship wants to appoint a successor, I'm willing to let her choice fall on one o' those two girls."

Her ladyship — a dark and silent old woman of eighty — did not like, in the first place, to be called her ladyship, and

did not relish either having her death talked of as a joke.

"Roscorla, now — Roscorla — there's a good chance for you, eh?" continued the old general. "We never could get you married, you know — wild young dog. Don't ye know the girls?"

"Oh, yes, Sir Percy," Mr. Roscorla said, with no great good-will; then he turned to the fire and began to warm his hands.

There was a tall young gentleman standing there who, in former days, would have been delighted to cry out on such an occasion, "Why, Roscorla's going to marry one of 'em." He remained silent now.

He was very silent, too, throughout the evening; and almost anxiously civil towards Mr. Roscorla. He paid great attention when the latter was describing to the company at table the beauties of West-Indian scenery, the delights of West-Indian life, the change that had come over the prospects of Jamaica since the introduction of coolie labour, and the fashion in which the rich merchants of Cuba were setting about getting plantations there for the growth of tobacco. Mr. Roscorla spoke with the air of a man who now knew what the world was. When the old general asked him if he were coming back to live in Eglosilyan after he had become a millionaire, he laughed, and said that one's coffin came soon enough without one's rushing to meet it. No; when he came back to England finally, he would live in London; and had Sir Percy still that old walled-in house in Brompton?

Sir Percy paid less heed to these descriptions of Jamaica than Harry Trelyon did, for his next neighbour was old Mrs. Trelyon, and these two venerable flirts were talking of old acquaintances and old times at Bath and Cheltenham, and of the celebrated beauties, wits, and murderers of other days, in a manner which her silent ladyship did not at all seem to approve. The general was bringing out all his old-fashioned gallantry — compliments, easy phrases in French, polite attentions; his companion began to use her fan with a coquettish grace, and was vastly pleased when a reference was made to her celebrated flight to Gretna Green.

"Ah, Sir Percy," she said, "the men were men in those days, and the women women, I promise you; no beating about the bush, but the fair word given, and the fair word taken; and then a broken

head for whoever should interfere, father, uncle, or brother, no matter who; and you know our family, Sir Percy, our family were among the worst —"

"I tell you what, madam," said the general, hotly, "your family had among 'em the handsomest women in the west of England — and the handsomest men, too, by Gad! Do you remember Jane Swanhope — the Fair Maid of Somerset they used to call her — that married the fellow living down Yeovil way, who broke his neck in a steeplechase?"

"Do I remember her?" said the old lady. "She was one of my bridesmaids when they took me up to London to get married properly after I came back! She was my cousin on the mother's side; but they were connected with the Trelyons, too. And do you remember old John Trelyon of Polkerris; and did you ever see a man straighter in the back than he was, at seventy-one, when he married his second wife — that was at Exeter, I think? But there now, you don't find such men and women in these times; and do you know the reason of that, Sir Percy? I'll tell you; it's the doctors. The doctors can keep all the sickly ones alive now; before it was only the strong ones that lived. Dear, dear me, when I hear some of those London women talk — it is nothing but a catalogue of illnesses and diseases. No wonder they should say in church, 'There is no health in us;' every one of them has something the matter, even the young girls, poor things; and pretty mothers they're likely to make! They're a misery to themselves; they'll bring miserable things into the world; and all because the doctors have become so clever in pulling sickly people through. That's my opinion, Sir Percy. The doctors are responsible for five-sixths of all the suffering you hear of in families, either through illness or the losing of one's friends and relatives."

"Upon my word, madam," the general protested, "you use the doctor badly. He is blamed if he kills people, and he is blamed if he keeps them alive. What is he to do?"

"Do? He can't help saving the sickly ones now," the old lady admitted; "for relatives will have it done, and they know he can do it; but it's a great misfortune, Sir Percy, that's what it is, to have all these sickly creatures growing up to intermarry into the good old families that used to be famous for their comeliness and strength. There was a

man, yes, I remember him well, that came from Devonshire—he was a man of good family, too, and they made such a noise about his wrestling. Said I to myself, wrestling is not a fit amusement for gentlemen, but if this man comes up to our country, there's one or other of the Trelyons will try his mettle. And well I remember saying to my eldest son George—you remember when he was a young man, Sir Percy, no older than his own son there—'George,' I said, 'if this Mr. So-and-so comes into these parts, mind you have nothing to do with him; for wrestling is not fit for gentlemen.' 'All right, mother,' said he; but he laughed, and I knew what the laugh meant. My dear Sir Percy, I tell you the man hadn't a chance—I heard of it all afterwards. George caught him up, before he could begin any of his tricks, and flung him on to the hedge—and there were a dozen more in our family who could have done it, I'll be bound."

"But then, you know, Mrs. Trelyon," Mr. Roscorla ventured to say, "physical strength is not everything that is needed. If the doctors were to let the sickly ones die, we might be losing all sorts of great poets, and statesmen, and philosophers."

The old lady turned on him.

"And do you think a man has to be sickly to be clever? No, no, Mr. Roscorla, give him better health and you give him a better head, that's what we believed in the old days. I fancy, now, there were greater men before all this coddling began than there are now, yes, I do; and if there is a great man coming into the world, the chances are just as much that he'll be among the strong ones as among the sickly ones—what do you think, Sir Percy?"

"I declare you're right, madam," said he, gallantly. "You're quite convinced me. Of course, some of 'em must go—I say, let the sickly ones go."

"I never heard such brutal, such murderous sentiments expressed in my life before," said a solemn voice; and every one became aware that at last Lady Weekes had spoken. Her speech was the signal for universal silence, in the midst of which the ladies got up and left the room.

Trelyon took his mother's place, and sent round the wine. He was particularly attentive to Mr. Roscorla, who was surprised. Perhaps, thought the latter, he is anxious to atone for all this bother that is now happily over.

If the younger man was silent and pre-

occupied, that was not the case with Mr. Roscorla, who was already assuming the airs of a rich person and speaking of his being unable to live in this district or that district of London, just as if he expected to purchase a lease of Buckingham Palace on his return from Jamaica.

"And how are all my old friends in Hans Place, Sir Percy!" he cried.

"You've been a deserter, sir, you've been a deserter for many a year now," the general said gaily, "but we're all willing to have you back again, to a quiet rubber after dinner, you know. Do you remember old John Thwaites? Ah, he's gone now—left 150,000*l.* to build a hospital, and only 5,000*l.* to his sister. The poor old woman believed some one would marry her when she got the whole of her brother's money—so I'm told—and when the truth became known, what did she do? Gad, sir, she wrote a novel abusing her own brother. By the way, that reminds me of a devilish good thing, I heard when I was here last—down at the inn, you know—what's the name of the girls I was talking about? Well, her ladyship caught one of them reading a novel, and not very well pleased with it, and says she to the young lady, 'Don't you like that book?' Then, says the girl—let me see what was it?—Gad, I must go and ask her ladyship——"

And off he trotted to the drawing-room. He came back in a couple of minutes.

"Of course," said he. "Devilish stupid of me to forget it. 'Why?' said the young lady, 'I think the author has been trying to keep the fourth commandment, for there's nothing in the book that has any likeness to anything in heaven above, or in the earth beneath, or the heavens under the earth——'"

"The waters under the earth."

"I mean the waters, of course. Gad, her ladyship was immensely tickled."

"Which of the two young ladies was it, Sir Percy? The younger, I suppose?" said Mr. Roscorla.

"No, no, the elder sister, of course," said Trelyon.

"Yes, the elder one, it was—the quiet one—and an uncommon nice girl she is. Well, there's Captain Walters—the old sea-dog—still to the fore; and his uniform too—don't you remember the uniform with the red cuffs that hasn't been seen in the navy for a couple of centuries, I should think! His son's got into Parliament now—gone over to the Reds, and the working-men, and those fellows

that are scheming to get the land divided among themselves—all in the name of philosophy—and it's a devilish fine sort of philosophy, that is, when you haven't a rap in your pocket, and when you prove that everybody who has must give it up. He came to my house the other day, and he was jawing away about primogeniture, and entail, and direct taxation and equal electoral districts, and I don't know what besides. 'Walters,' said I, 'Walters, you've got nothing to share, and so you don't mind a general division. When you have, you'll want to stick to what's in your own pocket.' Had him there, eh?"

The old general beamed and laughed over his smartness; he was conscious of having said something that, in shape at least, was like an epigram.

"I must rub up my acquaintance in that quarter," said Roscorla, "before I leave again. Fortunately, I have always kept up my club-subscription; and you'll come and dine with me, Sir Percy, won't you, when I get to town?"

"Are you going to town?" said Trelyon quickly.

"Oh, yes, of course."

"When?"

The question was abrupt, and it made Roscorla look at the young man as he answered. Trelyon seemed to him to be very much harassed about something or other.

"Well, I suppose in a week or so; I am only home for a holiday, you know."

"Oh, you'll be here for a week?" said the younger man, submissively. "When do you think of returning to Jamaica?"

"Probably at the beginning of next month. Fancy leaving England in November—just at the most hideous time of the year—and in a week or two getting out into summer again, with the most beautiful climate, and foliage, and what not, all around you! I can tell you a man makes a great mistake who settles down to a sort of vegetable life anywhere—you don't catch me at that again."

"There's some old women," observed the general, who was so anxious to show his profundity that he quite forgot the invidious character of the comparison, "who are just like trees—as much below the ground as above it—isn't that true, eh? They're a deal more at home among the people they have buried than among those that are alive. I don't say that's your case, Roscorla. You're comparatively a young man yet—you've got brisk health—I don't wonder at your

liking to knock about. As for you, young Trelyon, what do you mean to do?"

Harry Trelyon started.

"Oh," said he, with some confusion, "I have no immediate plans. Yes, I have—don't you know I have been cramming for the Civil Service examinations for first commissions?"

"And what the devil made the War Office go to those civilians?" muttered the general.

"And if I pull through, I shall want all your influence, to get me gazetted to a good regiment. Don't they often shunt you on to the First or Second West-Indians?"

"And you've enough money to back you too," said the general. "I tell you what it is, gentlemen, if they abolish the purchase of commissions in the army—and they're always talking about it—they don't know what they'll bring about. They'll have two sets of officers in the army—men with money, who like a good mess, and live far beyond their pay, and men with no money at all, who've got to live on their pay, and how can they afford the regimental mess out of that? But Parliament won't stand it you'll see. The war minister'll be beaten if he brings it on—take my word for that."

The old general had probably never heard of a royal warrant and its mighty powers.

"So you're going to be one of us?" he said to Trelyon. "Well, you've a smart figure for a uniform. You're the first of your side of the family to go into the army, eh? You had some naval men among you, eh?"

"I think you'd better ask my grandmother," said young Trelyon, with a laugh; "she'll tell you stories about 'em by the hour together."

"She's a wonderful woman that—a wonderful old creature," said the general, just as if he were a sprightly young fellow talking of the oldest inhabitant of the district. "She's not one of them that are half buried; she's wide enough awake, I'll be bound. Gad, what a handsome woman she was when I saw her first. Well, lads, let's join the ladies; I'm none of your steady-going old toppers. Enough's as good's a feast—that's my motto. And I can't write my name on a slate with my knuckles, either."

And so they went into the large, dimly-lit, red chamber, where the women were having tea round the blazing fire. The men took various chairs about; the conversation became general; old Lady

Weekes feebly endeavoured to keep up her eyelids. In about half-an-hour or so Mrs. Trelyon happened to glance round the room.

"Where's Harry?" said she.

No one apparently had noticed that Master Harry had disappeared.

CHAPTER XXXIV.

A DARK CONSPIRACY.

Now, when Harry Trelyon drove up to the Hall, after leaving Wenna Rosewarne in the road, he could not tell why he was vexed with her. He imagined somehow that she should not have allowed Mr. Roscorla to come home — and to come home just at this moment, when he, Trelyon, had stolen down for a couple of days to have a shy look at the sweet-heart who was so far out of his reach. She ought to have been alone. Then she ought not to have looked so calm and complacent on going away to meet Mr. Roscorla; she ought to have been afraid. She ought to have — in short everything was wrong, and Wenna was largely to blame.

"Well, grandmother," said he, as they drove through the avenue, "don't you expect every minute to flush a covey of parsons?"

He was angry with Wenna; and so he broke out once more in his old vein.

"There are worse men than the parsons, Harry," the old lady said.

"I'll bet you a sovereign there are two on the doorstep."

He would have lost. There was not a clergyman of any sort in or about the house.

"Isn't Mr. Barnes here?" said he to his mother.

Mrs. Trelyon flushed slightly, as she said —

"No, Harry, Mr. Barnes is not here. Nor is he likely to visit here again."

Now Mr. Roscorla would at once have perceived what a strange little story lay behind that simple speech; but Mr. Harry, paying no attention to it, merely said he was heartily glad to hear of it, and showed his gratitude by being unusually polite to his mother during the rest of his stay.

"And so Mr. Roscorla has come back," his mother said. "General Weekes was asking about him only yesterday. We must see if he will come up to dinner the night after to-morrow — and Miss Rosewarne also."

"You may ask her — you ought to ask her — but she won't come," said he.

"How do you know?" Mrs. Trelyon said, with a gentle wonder. "She has been here very often of late."

"Have you let her walk up?"

"No, I have generally driven down for her when I wanted to see her; and the way she has been working for these people is extraordinary — never tired, always cheerful, ready to be bothered by anybody, and patient with their suspicions and simplicity, beyond belief. I am sure Mr. Roscorla will have an excellent wife."

"I am not at all sure that he will," said her son, goaded past endurance.

"Why, Harry," said his mother, with her eyes wide open, "I thought you had a great respect for Miss Rosewarne."

"I have," he said, abruptly, — "far too great a respect to like the notion of her marrying that old fool."

"Would you rather not have him to dinner?"

"Oh, I should like to have him to dinner."

For one evening, at least, this young man considered, these two would be separated. He was pretty sure that Roscorla would come to meet General Weekes; he was positive that Wenna would not come to the house while he himself was in it.

But the notion that, except during this one evening, his rival would have free access to the inn, and would spend pleasant hours there, and would take Wenna with him for walks along the coast, maddened him. He dared not go down to the village, for fear of seeing these two together. He walked about the grounds, or went away over to the cliffs, torturing his heart with imagining Roscorla's opportunities. And once or twice he was on the point of going straight down to Eglosilvan, and calling on Wenna, before Roscorla's face, to be true to her own heart, and declare herself free from this old and hateful entanglement.

In these circumstances, his grandmother was not a good companion for him. In her continual glorification of the self-will of the Trelyons, and her stories of the wild deeds she had done, she was unconsciously driving him to some desperate thing, against his better judgment.

"Why, grandmother," he said, one day, "you hint that I am a nincompoop because I don't go and carry off that girl

and marry her against her will. Is that what you mean by telling me of what the men did in former days? Well, I can tell you this, that it would be a deal easier for me to try that than not to try it. The difficulty is in holding your hand. But what good would you do, after all? The time has gone by for that sort of thing. I shouldn't like to have on my hands a woman sulking because she was married by force—besides, you can't do these mad freaks now—there are too many police-courts about."

"By force? No!" the old lady said. "The girls I speak of were as glad to run away as the men, I can tell you, and they did it, too, when their relations were against the match."

"Of course, if both he and she are agreed, the way is as smooth now as it was then; you don't need to care much for relations."

"But, Harry, you don't know what a girl thinks," this dangerous old lady said. "She has her notions of duty, and her respect for her parents, and all that; and if the man only went and reasoned with her, he would never carry the day; but just as she comes out of a ball-room some night, when she is all aglow with fun and pleasure, and ready to become romantic with the stars, you see, and the darkness, then just show her a carriage, a pair of horses, a marriage-license, and her own maid to accompany her, and see what will happen! Why, she'll hop into the carriage like a dicky-bird; then she'll have a bit of a cry; and then she'll recover, and be mad with the delight of escaping from those behind her. That's how to win a girl, man! The sweethearts of these days think too much, that's about it: it's all done by argument between them."

"You're a wicked old woman, grandmother," said Trelyon, with a laugh. "You oughtn't to put such notions into the head of a well-conducted young man like me."

"Well, you're not such a booby as you used to be, Harry," the old lady admitted. "Your manners are considerably improved, and there was much room for improvement. You're growing a good deal like your grandfather."

"But there's no Gretna Green nowadays," said Trelyon, as he went outside, "so you can't expect me to be perfect, grandmother."

On the first night of his arrival at Eglosilyan he stole away in the darkness, down to the inn. There were no lamps

in the steep road, which was rendered all the darker by the high rocky bank with its rough masses of foliage; he feared that by accident some one might be out and meet him. But in the absolute silence, under the stars, he made his way down until he was near the inn; and there in the black shadow of the road he stood and looked at the lighted windows. Roscorla was doubtless within—lying in an easy-chair, probably, by the fire, while Wenna sang her old-fashioned songs to him. He would assume the air of being one of the family now—only holding himself a little above the family. Perhaps he was talking of the house he meant to take when he and Wenna married.

That was no wholesome food for reflection on which this young man's mind was now feeding. He stood there in the darkness, himself white as a ghost, while all the vague imaginings of what might be going on within the house seemed to be eating at his heart. This, then, was the comfort he had found, by secretly stealing away from London for a day or two; he had arrived just in time to find his rival triumphant.

The private door of the inn was at this moment opened; a warm glow of yellow streamed out into the darkness.

"Good-night," said some one: was it Wenna?

"Good-night," was the answer; and then the figure of a man passed down the road.

Trelyon breathed more freely; at last his rival was out of the house. Wenna was now alone; would she go up into her own room, and think over all the events of the day? And would she remember that he had come to Eglosilyan; and that she could, if any such feeling arose in her heart, summon him at need?

It was very late that night before Trelyon returned—he had gone all round by the harbour, and the cliffs, and the high-lying church on the hill. All in the house had gone to bed; but there was a fire burning in his study; and there were biscuits and wine on the table. A box of cigars stood on the mantelpiece.

Apparently he was in no mood for the indolent comfort thus suggested. He stood for a minute or two before the fire, staring into it, and seeing other things than the flaming coals there; then he moved about the room, in an impatient and excited fashion; finally, with his hand trembling a little bit, he sat down and wrote this note:—

"DEAR MOTHER,—The horses and carriage will be at Launceston station by the first train on Saturday morning. Will you please send Jakes over for them? And bid him take the horses up to Mr. —'s stables, and have them fed, watered, and properly rested before he drives them over. Your affectionate son, HARRY TRELYON."

Next morning, as Mabyn Rosewarne was coming briskly up the Trevenna road, carrying in her arms a pretty big parcel, she was startled by the appearance of a young man, who suddenly showed himself overhead, and then scrambled down the rocky bank until he stood beside her.

"I've been watching for you all the morning, Mabyn," said Trelyon. "I — I want to speak to you. Where are you going?"

"Up to Mr. Trehella's. You know his granddaughter is very nearly quite well again; and there is to be a great gathering of children there to-night to celebrate her recovery. This is a cake I am carrying that Wenna has made herself."

"Is Wenna to be there?" Trelyon said, eagerly.

"Why, of course," said Mabyn, petulantly. "What do you think the children could do without her?"

"Look here, Mabyn," he said. "I want to speak to you very particularly. Couldn't you just as well go round by the farm road? Let me carry your cake for you."

Mabyn guessed what he wanted to speak about, and willingly made the circuit by a more private road leading by one of the upland farms. At a certain point they came to a stile; and here they rested. So far Trelyon had said nothing of consequence.

"Oh, do you know, Mr. Trelyon," Mabyn remarked, quite innocently, "I have been reading such a nice book — all about Jamaica."

"So you're interested about Jamaica, too?" said he, rather bitterly.

"Yes, much. Do you know that it is the most fearful place for storms in the whole world — the most awful hurricanes that come smashing down everything and killing people. You can't escape if you're in the way of the hurricane. It whirls the roofs off the houses, and twists out the plantain-trees just like straws. The rivers wash away whole acres of canes and swamp the farms. Sometimes the

sea rages so that boats are carried right up into the streets of Kingston. There!"

"But why does that please you?"

"Why," she said, with proud indignation, "the notion of people talking as if they could go out to Jamaica and live forever, and come back just when they please — it is too ridiculous! Many accidents may happen. And isn't November a very bad time for storms? Ships often get wrecked going out to the West Indies, don't they?"

From Blackwood's Magazine.
THE ABODE OF SNOW.

ZANSKAR.

I SHALL touch very briefly indeed upon Lahaul, in order to pass almost at once into the more secluded and interesting province which affords the subject and the title of this paper. Lahaul is pretty well known, being traversed every year by Himáliyan tourists on their way to Ladák. If we were to take it for a Hindústhani word (a subject on which I have no information), the proper translation of it would be "a howling wilderness;" and that is exactly what Lahaul is, in one respect important for travellers. As compared with other parts of the Himáliya, it is far from being a howling wilderness in any physical sense of these words; because it is comparatively rich in trees and fields, and among the inner Himáliya the valleys are much more open than in the outer, where it is too often impossible to see the mountains because of the mountains. After the scenery around, there is a delightful sense of relief in entering its more open valleys and getting pretty full views of the great snowy ranges; there is also comfort in travelling along a cut road, however narrow it may be: but these advantages are counterbalanced by the disposition of the Lahaules towards travellers, which is so bad that the tourist requires to be forewarned of it. There is, however, a great set-off to that in the presence of the Moravian missionaries, who at Kaelang have created an oasis amidst the squalor and wildness of this Himáliyan province, and have done as much for its improvement as the difficult circumstances of their position would allow. A Yarkund merchant had complained bitterly to me of the exactions and other annoyances which he was experiencing in Lahaul; and this conjoining

with my own experience — which I found afterwards to be in accordance with that of other English travellers, some of high official position — induced me to inquire of the Moravians the cause of such a state of matters, which presents a serious obstacle to the development of trade between Yarkund and British India. One reason they assigned was, that the people of Lahaul were irritated at the making of the cut road, which allowed ponies and mules to traverse that province, and so deprived them not merely of their rights of portage, but also of certain vested rights of pilfering from packages, which they valued much more. Another reason assigned was the hostility of the Tschö, or larger zemindars; but, I believe, the difficulty is intimately connected with the general position assumed by the British government. It has been so successfully instilled into the minds of the people by the Tschö, that the British rule will come to an end, that when the Moravians purchased some land at Kaelang a few years ago, they could only obtain it on the condition being formally inserted in the title-deed, that it should revert to the original owners whenever British rule came to an end in Lahaul. A fact like this hardly requires comment, and I may leave it to speak for itself. I shall only mention further, in general connection with this province, that at Gandla, and still better, about half-way on the road to it from Sísú, magnificent avalanches of snow may be both heard and seen. On the opposite side of the Chandra River there rises, to the height of 20,356 feet, the extremely precipitous peak M of the Trigonometrical Survey; and from the great beds of snow upon it, high above us, avalanches were falling every five minutes, before and after mid-day, on to two long glaciers which extended almost down to the river. As the bed of the Chandra is here under ten thousand feet, the highest peak must have risen up almost sheer more than ten thousand feet, in tremendous precipices, hanging glaciers, and steep beds and walls of snow; though on its north-western shoulder the ascent was more gradual, and was covered by scattered pines. Immediately in front the slope was terrific; and, every few minutes, an enormous mass of snow gave way and fell, flashing in the sunlight, on steep rocks. A great crash was heard as these masses struck the rocks, and a continuous roar as they poured downwards, until they broke over a precipice above the glaciers, and then fell with a

resemblance to great cataracts of white foaming water, and sending up clouds of snow-spray as they struck the ice. The volume of one of these avalanches must, so long as it lasts, be greater than that of any known caracat, though they descend thousands of feet, and their final thundering concussion is as the noise of many waters in the solitudes around. "They too have a voice, yon piles of snow," and truly these are —

Sky-pointing peaks,
Oft from whose feet the mighty avalanche
Shoots downward, glittering through the pure
serene.

From the junction of the Chandra and Bhaga Rivers the pilgrim has the choice of several routes to Kashmir, but they are all of such a character that even Hopeful might be excused for contemplating them with some dismay. The easiest, undoubtedly, is that by Leh; but it is much the longest and dreariest, involving thirty-seven marches to Strinagar, and an eighteen-thousand-feet pass, besides several more of lesser height. A shorter, and, on the whole, a much easier road, goes by way of Chamba and Badrawar; but the difficulty is how to get into it, because (not to speak of a *jhála* over the Chandra, which beats all the bridges I ever saw, and the mere sight of which makes the blood run cold) the best way into it is across the fearful Barra Bhagal Pass, over which beasts of burden cannot cross, and where there is a dangerous *arrête*, which can only be passed with the aid of ropes. The usual route taken is that in twenty-seven marches, down the Chandra-Bhaga River to Kishtwar. But though that route has been improved of late years, there is one part of it which is impassable for mountain-ponies, and it involves a descent to five thousand feet down a close warm valley. So I set to inquire whether my old idea of following the lie of the Himáliya, and always in its loftier valleys, could not be carried out on this part of my journey; and was delighted to hear from Mr. Heyde, the accomplished head of the Moravian Mission, that it was quite passable; that he himself had traversed about the first half of the way, and that it led through Zanskar, a country of the very existence of which I was then as ignorant as my readers probably are now. Mr. Heyde was quite enthusiastic in praise of this route, and he even spoke of its leading over flowery *maidans* or plains. I am bound to say, however, for

the benefit of future travellers, that this was a delusion and a snare. Men who have lived for many years among the Himáliya come to have very peculiar ideas as to what constitutes a *maidan* or plain. There were no difficulties on this route? I inquired. Oh, there were none to speak of, except the Shinkal Pass which led over into Zanskar. It was of unknown height; it required four days to cross it; there were no villages or houses on the way, and the top of it was an immense glacier. He (Mr. Heyde) had once crossed it in company with Brother Pagell, and Bruder Pagell had fainted whenever they got off the glacier. But there had been snow on the ground, which was very fatiguing; and at the end of the fourth day I would descend upon Kharjak, the first village in Zanskar, which I would find to be a nice hospitable place, about fourteen thousand feet high. Were there other passes? Well, there was the Pense-la Pass, but that was nothing. A flowery *maidan* led up to it (my experience was that a glacier and six feet deep of snow led up to the top of it); but he did not know farther, and there might be places a little difficult to get over between Súrú and Kashmir. I mention this to show how regular Himáliyans look upon such matters; for Mr. Heyde was careful to warn me about the lateness of the season, to inquire into the state of my lungs and throat, and to give me all the information and assistance he could. It took me exactly twenty-eight marches and thirty-one days to reach Srinagar from Kaelang by this route, and it could not well be done in less; but my difficulties were much increased by a great snowstorm which swept over the Himáliya in the middle of September, and which need not be counted on so early in the season.

The selection of this route nearly caused a mutiny among my servants, who had been promising themselves the warm valley of the Chandra-Bhaga. So unknown a country as Zanskar frightened them, and Silas unfortunately heard of Mr. Pagell's fainting-fit, which almost made the eyes start out of his own head, since he knew that gentleman's endurance as a mountaineer. The only doubt I had was about the weather, which began to look threatening; but I finally resolved on this interesting route, and found good cause to congratulate myself on having done so.

On the 3d September I took farewell of Brothers Heyde and Redslob, the Moravian missionaries, of their kind

ladies, and of Mr. Theodor, who was suffering intensely from the exposure he had incurred in constructing the road to Leh over the Barra Lacha. It was cold and gloomy the day I left Kaelang. The clouds that hung about the high mountains added to the impressiveness of the scene. Through their movements an icy peak would suddenly be revealed for a few moments; then a rounded snow-dome would appear, to be followed by some huge glacier, looking through the clouds as if it were suspended in the gloomy air. For two days we pursued the road to Leh — namely, to the village of Darcha, from which the path over the great Shinkal Pass into Zanskar diverges to the left, or north-west, up the valley of the Kado Tokpho River. This was the last human habitation before reaching Kharjak four days' journey off; and though the most of my coolies had, by Mr. Heyde's advice, been engaged at Kaelang to take me as far as Kharjak, their number had to be supplemented at Darcha. To secure that, a representative of British authority, a policeman so called, had been sent with me to Darcha; but the policeman soon came back to my tent in a bruised and bleeding condition, complaining that the people of the village had given him a beating for his interference; and the men who did engage to go, tried to run away when we were well up the desolate pass, and gave me other serious trouble. The first day of our ascent was certainly far from agreeable. The route — for it would be absurd to speak of a path — ran up the left bank of the Kado Tokpho, and crossed some aggravating stone avalanches. My *dandy* could not be used at all, and I had often to dismount from the large pony I had got at Kaelang. Our first camping-ground was called Dakmachen, and seemed to be used for that purpose, but had no good water near. On great part of the next day's journey, granite avalanches were also a prominent and disgusting feature. Indeed there are so many of them in the Kado Tokpho valley, and they are so difficult and painful to cross, that I was almost tempted to wish that one would come down in my presence, and let me see what it could do. They were very like Himáliyan glaciers, but had no ice beneath; and an appalling amount of immense peaks must have fallen down into this hideous valley. An enterprising *dhirsie* or tailor, well acquainted with the route, was our guide, and the owner of my pony, and I

could not help asking him if this were one of the *maidans* of which Mr. Heyde had spoken; but he said we should meet one presently, and found one wherever there was a narrow strip of grassy land. At one place we had to work up the side of a sort of precipice, and met coming down there a naked Hindú *barwa*, or religious devotee, who was crossing from Zinskar to Lahaul, accompanied by one attendant, and with nothing but his loin-cloth, a brass drinking-pot, and a little parched grain. He was a young man, and appeared strong and well-nourished. It was passing strange to find one of these ascetics in the heart of the Himáliya, far from the habitations of men; and when I went on without giving him anything, he deliberately cursed both my pony and myself, and prophesied our speedy destruction, until I told him that I had slept at the foot of the Dread Mother, which seemed to pacify him a little.*

The first day and a half were the worst part of this journey over the Shinkal Pass. Its features changed greatly after we reached the point where the Kado Tokpho divides into two branches, forded the stream to the right, and made a very steep ascent of about 1,500 feet. Above that we passed into an elevated picturesque valley, with a good deal of grass and a few birch-bushes, which leads all the way up to the glacier that covers the summit of the pass. The usual camping-ground in this valley is called Ramjakpük, and that place is well protected from the wind; but there are bushes to serve as fuel where we pitched our tents a mile or two below, at a height of about fifteen thousand feet. Towards evening there was rain and a piercing cold wind, with the thermometer at 36° Fahr., and many were the surmises as to whether we might not be overtaken by a snowstorm on the higher portion of the pass next day.

In the morning the thermometer was exactly at freezing-point, the grass was white with hoar-frost, and there was plenty of ice over the streams as we advanced upwards. For some way the path was easy; then there was a long steep ascent, and after that we came on the enormous glacier which is the crest of this awful pass. The passage on to the

glacier from solid ground was almost imperceptible, over immense ridges of blocks of granite and slabs of slate. Some of these first ridges rested on the glacier, while others had been thrown up by it on the rocky mountain-side; but soon the greater ridges were left behind, and we were fairly on the glacier, where there were innumerable narrow crevasses, many of them concealed by white honey-combed ice, numerous blocks of stone standing on pillars of ice, and not a few rills, and even large brooks, the sun having been shining powerfully in the morning. It was not properly an ice-stream, but an immense glacial lake, on which we stood; for it was very nearly circular; it was fed by glaciers and snow-slopes all round, and it lapped over into the villages beneath in several different directions. I was prevented by an incident, to be mentioned presently, from calculating the height of this pass, and the Trigonometrical Survey does not appear to have done so; but as Kharjak, the first village in Zanskar, is 13,670 feet, and it took me the greater part of next day to get down to Kharjak, though I camped this day at least 1,500 feet below the summit of the pass, on the Zanskar side, I conclude that the Shinkal cannot be less than eighteen thousand feet high, and that it may possibly be more. It must be distinguished from another and neighbouring pass, also called the Shinkal, which is to be found in the Topographical Sheet, No. 46, and which runs from Burdun Gonpa apparently nowhere except into a region of glaciers. As the word Shinkal thus occurs twice on the frontier of Zanskar, it is probably a local word either for a pass or a glacier. Of course the difficulty of breathing at this height was very great; some of my people were bleeding at the nose, and it would have been hardly possible for us to ascend much higher. Humboldt got up on the Andes to twenty-one thousand feet, and the Schlegelweits in the Himáliya to twenty-two thousand; but such feats can only be accomplished in very exceptional states of the atmosphere. Higher ascents have been made in balloons, but there no exertion is required. In ordinary circumstances, eighteen thousand feet, or nearly three thousand feet higher than the summit of Mont Blanc, is about the limit of human endurance when any exertion is required; and on the Shinkal I had the advantage of a strong sagacious pony, which carried me over most of the glacier easily enough; but I

* Kalika, the most inaccessible peak of the holy mountain Girnar, in Kathiawar. It is consecrated to Kali, or Durga, the goddess of destruction; is frequented by Aghoras—devotees who shun all society, and are said to eat carrion and human flesh. The general belief is, that of every two people who visit Kalika, only one comes back.

had a good deal of work on foot, and suffered much more from the exertions I had to make than any one else.

On reaching the middle of this glacial lake it became quite apparent where its sea of ice came from. On every side were steep slopes of snow or *névé*, with immense beds of snow overhanging them. It was more like a Place de la Concorde than the basin of the Aletsch glacier in Switzerland; and the surrounding masses of *névé* rose up in a much more abrupt and imposing manner than the surroundings of any scene amid the high Alps. On the right the snow-slopes were especially striking, being both beautiful and grand. A dazzling sheet of unbroken white snow rose up for more than a thousand feet, on a most steep incline, to vast overhanging walls of what I may call stratified *névé*, from which huge masses came down every now and then, with a loud but plangent sound. So, all around, there were great ridges, fields, domes, walls, and precipices of snow and ice. No scene could give a more impressive idea of eternal winter, or of the mingled beauty and savagery of high Alpine life. Even Phoolleyram, my Kunáwar Múnshi, was struck by it. Up to this point I was not aware that he knew any English, and had not heard him speak in any language for days, he being rather sulky at having to walk for the most part; but on this occasion he suddenly turned round to me, and to my intense surprise, said in English,—"I think this must be the region of perpetual snow." That was doubtless a reminiscence of old book-knowledge of English which had almost passed from his mind, but was recalled by the extraordinary scene around, and it came in quite ingeniously and very appropriately.

My attention, however, was soon recalled to a more practical matter. Knowing the danger of crossing a glacier at this height, and in the threatening weather which had been gathering for several days, I had given strict orders that all the *bigarries*, or porters, should keep together and beside me; but, on the very summit of the pass, in the middle of the glacial lake, I found that three of them were missing, and that they were the three who were the most lightly laden, and who carried my most important effects—namely, my tent-poles, my bedding, and the portmanteau which contained my money. The tent-poles might have been dispensed with; but still the want of them would have caused great

inconvenience in an almost treeless region, where they could not have been replaced. I could only have supplied the want of the bedding by purchasing sheepskins, furs, or blankets alive with body-lice; and the loss of the rupees would have been worse than either. I have no doubt this was a planned arrangement, whoever planned it; for the *bigarries*, who carried these light burdens, were strong men, and the obvious motive was that I should be compelled to turn back from Zanskar and take the Chandra-Bhaga route. On discovering this state of matters I was excessively angry, not so much because of the attempt to force my steps, as on account of the danger in which some ignorant fools had placed us all. Though the morning had been fine, bad weather had been gathering for several days; the sky was now obscured; clouds were rolling close round, and to have been overtaken by a snow-storm on that glacier would have been almost certain death to us all. So long as the sky was clear and we had the snow-walls to guide us, it was easy enough to cross it; but where would we have been, in a blinding snowstorm, on a glacier at least eighteen thousand feet high, with no central moraine, and lapping over on half-a-dozen different sides? Moreover, the snow would cover the rotten honey-combed ice which bridged over innumerable crevasses. All the people about me, except, perhaps, the *dhirais*, were quite ignorant of the danger we were in, and that exasperated me more at this tricky interference. As I was determined not to turn on my steps, I saw that not a moment was to be lost in taking decided measures; so I made my servants and the *bigarries* continue across the glacier, with instructions to camp at the first available spot on the Zanskar side, and threatened them if they delayed: while I myself rode back, accompanied by one man, in search of the missing coolies and their loads. There was an obvious danger in this, because it involved the risk of being cut off from my people and baggage; but it was really the only thing to be done in the circumstances consonant with a determination to proceed. So I waited until my party disappeared on the brow of the glacier, and then rode back in a savage and reckless humour over ice which I had previously crossed in a very cautious manner. I could easily retrace our track until we got to the great stony ridges, and then the man I had taken with me

was useful. On getting off there, and descending the valley a short way, I found my three light-laden gentlemen quietly reposing, and immediately forced them to resume their burdens, and go on before me. Even then they showed some unwillingness to proceed; and I had to act the part of the Wild Horseman of the Glacier, driving them before me, and prodding whoever happened to be hindmost with the iron spike of my heavy alpenstock, which considerably accelerated their movements. There was the most urgent reason for this, because, had we been half an hour later in getting over the summit of the pass, the probability is that we should have been lost. It began to snow before we got off the glacier; and when we descended a few hundred feet it was snowing so heavily on the ice-lake we had just left that we could not there have seen two yards before our faces, and it would have been quite impossible to know in which direction to turn, the tracks of our party being obliterated, and the crevasses, which ran in every direction, affording no guidance. Even on the narrow glaciers of the Alps a number of people have been lost by being caught in snowstorms; so it can be imagined what chance there would have been for us on a great lake of ice above eighteen thousand feet high. Without the tracks and a sight of the surrounding snow-walls to guide us, we could only have wandered about hopelessly in the blinding storm; and if we did not fall into a crevasse, through rotten ice concealed by the new-fallen snow, we might have wandered on to one of the outlets where the ice flowed over in steep hanging glaciers which it would have been impossible to descend. Fortunately, however, we managed to keep the proper track in spite of the snow which was beginning to blind us. On reaching our camp I found it pitched on a morass about fifteen hundred or two thousand feet below the summit of the pass. The thermometer was two degrees below freezing-point, and a little snow continued to fall about us. I felt extremely exhausted after the exertion and excitement of the day; but some warm soup and the glow of a fire of birch branches revived me, and I soon fell into a deep refreshing sleep.

A little after midnight I was awakened by the intense cold; and went out of my tent, and a little way up the pass, to look upon the scene around. Everything was frozen up and silent. The pools of water

about us had ice an inch thick; my servants were in their closed *rauths*, and the *bigarries* were sleeping, having, for protection from the cold, twisted themselves into a circle round the embers of their dying fire. There was the awful silence of the high mountains when the snow and ice cease to creep under the influence of the sunbeams. The storm had ceased;

The mute still air

Was music slumbering on her instrument;

the snow-clouds also had entirely passed away. The moon, which was little past its full, cast a brilliant radiance on the savage scene around, so that every precipice, snow-wall, and icy peak was visible in marvellous distinctness; and in its keen light the great glaciers shone gloriously: but, brilliant as the moon was, its light was insufficient to obscure the stars, which, at this altitude, literally flamed above, displaying—

All the dread magnificence of heaven.

At night, amid these vast mountains, surrounded by icy peaks, shining starlike and innumerable as the hosts of heaven, and looking up to the great orbs flaming in the unfathomable abysses of space, one realizes the immensity of physical existence in an overpowering and almost painful manner. What am I? what are all these Tibetans and Paharries compared with the long line of gigantic mountains? and what the mountains and the whole solar system as compared with any group of the great fixed stars? But this whole stellar universe which we see around us distinctly, extending beyond the limits of human conception—sparkling with stars on which the earth would be no more than a grain of sand is upon the earth, and including the undistinguished orbs which afford the light of the Milky Way—would be no more to our vision, if beheld from one of those dim nebula rings, composed of more distant stars, than the wreath of smoke blown from a cannon's mouth. Though the facts have long been known, modern thought appears to be only now realizing the power and boundless extent of the physical universe; for the phenomenon of conversion, or the effective realization of admitted truth, is by no means confined to purely religious circles, but is a process which extends over the whole range of human knowledge. It is no wonder that such a realization should engross the thoughts of many minds, and appear almost as a new revelation. But, accus-

tomed as I was to the questions which thus arise, a strange feeling came over me amid those snowy peaks and starlit spaces. How wonderful the order and perfection of the inorganic universe as compared with the misery and confusion of the organic! Oxygen does not lie to hydrogen; the white clouds pass gently into exquisitely-shaped flowers of snow; the blue ocean laughs unwounded round our star, and is gently drawn up to form the gorgeous veil of blue air and many-tinted cloud which makes the rugged earth beautiful. With perfectly graduated power, the sun holds the planets in their course, and, to the utmost range of mortal ken, the universe is filled with glorious orbs. But when we turn to the organic life around us, how strange the contrast, and especially as regards its higher manifestations! A few individuals in every age, but especially at present, when they benefit by the exceptional standing-ground which such discoveries as that of the use of steam has given to the people of this century, may, arguing from their own experience, imagine that this is a satisfactory and happy world; but, unfortunately, it is only a select few who console themselves with that illusion. Not in selfishness nor in anger, but in sad necessity, in every age and clime, the voice of humanity has risen in wondering, sorrow, and questioning to the silent heaven, and a different tone is adopted chiefly by those who are tossed up for a moment on the wave into the sunlight. I need only refer to what the history of the animal creation (and, more especially, the human part of it) has been, and to the part which even its better tendencies play in augmenting the sum of wretchedness. The Hurdwar tigress, which held a boy down in her den, though his shrieks rang from the rocks around, while her cubs played with him, was gratifying a holy maternal instinct; and the vivisectors of Europe are only slaking the sacred thirst for knowledge. Dr. Livingstone wrote in one of his last journals, after witnessing a massacre of inoffending villagers — men, women, and children — on the shore of Lake Tanganyika: "No one will ever know the exact loss on this bright sultry summer morning; it gave me the impression of being in hell;" but still

The heavens keep up their terrible composure.

The scene to which he referred was far from being an abnormal one on the

African continent, or different from its ordinary experience for countless generations; and when he referred to the locality in which such scenes are supposed to be natural, perhaps the great African traveller hit the mark nearer than he was himself aware of, though that would not prove that there may not be a worse place below. I merely give one or two illustrations, and do not attempt a proof which would require one to go over the history of the human race and of the brute creation which has been conjoined with it by the common bond of misery. I need scarcely say, also, that the view of organic life which I have thus mildly indicated is the same as that of all the great thinkers of the earth, and of all our great systems of religion. The ancient Hindú sages soon perceived and expressly taught that our life was utterly undesirable. It was his profound sense of the misery and worthlessness of life which drove Gautama Búdhá from his throne into the jungle, which underlies all the meaning of the religion which he founded, and which finds forcible expression in the Búdhist hymn — "All is transitory, all is misery, all is void, all is without substance." And the cardinal doctrine of Christianity has the same meaning, though it is often verbally accepted without being realized. Accepting it, I cannot conceal from myself its true signification. That awful meaning plainly is, that the only way in which the Creator of the human race could redeem it, or perhaps only a portion of it, from utter perdition, was by identifying Himself with it, and bearing an infinite burden of sin and agony. Shirk the thought as we may, it cannot be denied that this is the real meaning of the Christian religion, and it finds innumerable corroborations from every side of our knowledge. The burden is shifted, but has to be borne. Human existence is redeemed and rendered tolerable, not from any efforts made out of its own great misery and despair, but from its Creator taking upon Himself the punishment and the agony which pursues His creation. Far be it from me to complain of the providence which enabled me to pass through those tremendous scenes in safety, or to arraign the wisdom of the arrangements of the universe. I only suggest, that existence in itself implies effort, pain, and sorrow; and that the more perfect it is, the more does it suffer. This may be a Búdhistic idea; but, as pointed out above, it is cer-

tainly a Christian doctrine, though the true meaning of it seems scarcely to have been understood. Of His own will, Deity is involved in the suffering of His creation, so that we cannot say where the agony ends. Our notions on this subject are confused by starting from the supposition that there is an effortless existence of pure unshadowed enjoyment for which no price has been paid; and the more we realize the actual state of the case, though doing so may have a saddening effect, yet it will not necessarily lead us to doubt that existence vindicates itself, much less to arraign eternal providence, or the ways of God towards man.

Thoughts of this character, however true they might be in themselves, were not fitted to give a cheerful aspect to that midnight scene on the Shinkal Pass. The "Zartusht Namah" says that when Zoroaster lay one cold night under the stars, "understanding was the companion of his soul." I hope he found understanding to be a more agreeable companion than I did; for there are moments of depression when we seem to feel still in need of some explanation why organic life should exist at all.

A life

With large results so little rife,
Though bearable, seems hardly worth
This pomp of worlds, this pain of birth.

Our civilizations reach a certain point, and then die corruptly, leaving half-savage races inspired by coarse illusions, to reoccupy the ground and react the same terrible drama. Wordsworth put the usual answer admirably when he said, —

O Life! without thy checkered scene
Of right and wrong, of weal and woe,
Success and failure, could a ground
For magnanimity be found,
For faith, 'mid ruined hopes serene?
Or whence could virtue flow?

But the difficulty of this argument, so far as our knowledge goes, appears to be the enormous waste and useless, endless cruelty of nature, as also in the purely fanciful ground of the suppositions which have been brought to explain that cruelty, and which, even if admitted, do not really solve the mystery. Nor is there much consolation to be found in the views of the monadic school, which have been so forcibly expressed by Goethe in his poem *Das Göttliche*, which I may here translate, as it was in my mind on the Shinkal Pass: —

Noble be man,
Helpful and good;
For this alone separateth him
From every being
We do know of.

Hail to the unfathomed
Highest Being
Whom we follow!
May He, too, teach us
All believing.

Ever Nature
Is unfeeling:
She lighteth the sun
Over evil and good;
And for the destroyer
Shine, as o'er the best,
The moon and the stars.

Storms and rivers,
Thunder and hail,
Pursue their path,
Ever hasting,
Downward breaking
On the sons of men.

Also Fortune,
Wand'ring along,
Seizes the locks
Of the innocent child,
And empties her horn
Over the guilty.

For all of us must,
After eternal
Laws of iron,
Fulfil our being.

Man alone has power
To grasp the Impossible.
He separateth,
Chooseth and judgeth
And righteth the evils
The hour has brought forth.

He alone dare
Reward the righteous,
The evil punish,
Purify, and save;
And usefully govern
Doubting and error.

And ever we honour
Him whom we image,
In honouring men
Immortal in deeds
Over great and small.*

Let the noble man
Be helpful and good;
Unwearied, let him shape
The useful and right,
Be to us an image
Of the Eternal.

* This stanza differs somewhat from the original.

This is well in its way ; but when we consider what humanity has been able to accomplish in imaging the divine, it would seem as if a voice had said to us, as to the Prometheus of Æschylus, "Evermore shall the burden of the agony of the present evil wear thee down ; for he that shall deliver thee exists not in nature." There is some refuge, however, for the spirit in the order and beauty of this unfeeling inorganic nature. The Yliastron, or *materia prima*, has strange attractions of its own. So orthodox a thinker as John Foster could write — "There is through all nature some mysterious element like soul which comes with a deep significance to mingle itself with our own conscious being. . . . conveying into the mind trains and masses of ideas of an order not to be gained in the schools." Speaking of a departed friend and brilliant poet, Goethe said : "I should not be surprised if, thousands of years hence, I were to meet Wieland as the monad of a world — as a star of the first magnitude. . . . We can admit of no other destination for monads than as blessed co-operating powers sharing eternally in the immortal joys of gods." In like manner, when the most purely poetical genius of England foresaw his own passage from this troubled life, it was as a star that the soul of Adonais beacons from the abodes of the Eternal ; and in describing the gain of his brother-poet, he could only break forth —

It was for thee yon kingless sphere has long
Swung blind, in unascended majesty,
Silent, alone amid a heaven of song.

These may be something more than poets' dreams, but "the immortal mind craves objects that endure," and such are scarcely to be found in lower forms of life, or in the inorganic world, for even

The lily fair a transient beauty wears,
And the white snow soon weeps away in tears.

Logical thought becomes impossible when we rise into these eighteen-thousand-feet regions of speculation ; and it may be safer to trust our instincts, such as they are. Apparently heedless of us, the worlds roll through space, —

While we, the brave, the mighty, and the wise,
We men who in our morn of youth defied
The elements, must vanish ; — be it so !
Enough if something from our hands have

power
To live and act and serve the future hour ;
And if, as toward the silent tomb we go,

Through love, through hope, and faith's
transcendent dower,

We feel that we are greater than we know.

Next morning was excessively cold, and we were glad to hurry down the pass. The way ran down a not very steep slope to a glacier-stream (which it might be difficult to ford during the heat of the day), then on a slight ascent to the end of an enormous spur of the mountains where there was a very long and extremely steep descent to La-kúng — "the pass-house," a large, low, stone room with no window but the door, and with open spaces between the stones, — which has been erected for the protection of shepherds and travellers. We were now within the watershed of the Indus, in the valley of the Kharjak Chu, one of the mountain-streams which form the Tsarap Lingti River. There were very formidable-looking mountains to the right, through which the *dhirsie*, who was a great geographical authority, assured me there was no available pass to Ladák. In and descending from the mountains to the left — that is to say, on the left bank of the river down to Padam, and on the right bank of the river which runs from the Pense-la Pass down to Padam on the other side — there is probably the most tremendous series of glaciers to be found in the world, out of Arctic and Antarctic regions. There are literally hundreds of them ; they extend on through Sárú, and even within the boundary of Kashmir proper, and at some parts they come down into the large rivers threatening to block them up.

As the path runs down its right bank we had to ford the Kharjak Chu ; but though broad and rapid, it is shallow at this place, and there was little difficulty in doing so ; but in warmer weather it must be impossible to cross it during the day. The path now followed the windings of the stream, sometimes over grassy meads, and anon over aggravating stone avalanches. We were now fairly in the almost fabulous Zanskar ; but no signs of human habitations were visible. At first we passed beneath tremendous cliffs of cream-coloured granite, which, as we got farther down, appeared as one side of an enormous detached pyramidal mass, high and steep as the Matterhorn, and so smooth that scarcely any snow lodged upon it, though it could have been little short of twenty thousand feet high. From some points this extraordinary mountain looked almost like a column ;

and I am sure if any Lama, *bawa*, or lover of inorganic nature could get up to the top of it, he would enjoy the most perfect seclusion. Of all the mountains I have ever beheld, those of Zanskar were the most picturesque, weird, astounding, and perplexing. For several marches, all the way down the valley of this river and through almost all the valley of the Tsarap Lingti, the precipice-walls were not only of enormous height, but presented the most extraordinary forms, colours, and combinations of rock. Even the upper Spiti valley has nothing so wonderful. There were castles, spires, plateaus, domes, *aiguilles* of solid rock, and spires composed of the shattered fragments of some fallen mountains. At the entrance of many of the ravines there were enormous cliffs thousands of feet high, which looked exactly as if they were bastions which had been shaped by the hands of giants. Every mile or so we had to scramble across the remains of some stone avalanche which deflected the stream from its course, and under cliffs from which great rocks projected so that it looked as if a slight touch would send them thundering down. Then the colour of these precipice-walls was of the richest and most varied kind. The predominant tints were green, purple, orange, brown, black, and whitish-yellow, but I cannot say how many more there might have been; and green, purple, and deep brown were most frequent. It can easily be imagined that, with such colours, the dazzling sunlight and the shadows of the mountains falling over the valley worked the most wonderful effects. Sometimes the sunlight came down through a dark-coloured ravine like a river of gold. In certain lights the precipices appeared almost as if they were of chalcedony and jasper. The dark-brown manganese-like cliffs looked exceedingly beautiful; but no sooner was one extraordinary vista left behind than a different but not less striking one broke upon the view. The geology of these valleys was rather puzzling; for a remarkable feature here, as elsewhere to a less degree among the Himaliya, is the way in which various rocks pass into each other—as the clay-slate into mica-slate the, mica-slate into granite, the quartzose conglomerate into greywacke, and the micaceous schist into gneiss. I was unable to pay any special attention to the geology of this interesting region, and indeed I found the continuous journey I had undertaken rather too much for my strength. Could I have

rested more frequently I would have enjoyed it more, and have observed more closely. As it was, I had continually to press onwards, and being alone caused a great strain on my energies, because everything in that case depends on the one traveller himself. He has to see that proper arrangements are made; that his servants do not practise extortion; that his camp is roused at an early hour in the morning; and he has almost to sleep with one eye open. Anything like an examination of these Zanskar cliffs would have required several days specially devoted to them, which I could by no means spare. Some of them were composed of rocks which I had never met with before; and others, judging from the fragments in the valley below, were of quartzose conglomerate, passing into greywacke of grey and greenish colour, of clay-slate, very fine-grained mica-slate, gneiss, greenstone, smooth soapy talc, and porphyry. There seemed to be much zeolite, and probably other minerals abounded. This part of Zanskar does not seem to have been examined by the Trigonometrical Survey, and is nearly a blank in all our maps.

From The Cornhill Magazine.

MISS ANGEL.

CHAPTER XXIV.

THE PLEIADES.

THE weather broke suddenly after this last sunshiny day. Angelica could not go out. The wind tossed the clouds, and heaped dull palls over Golden Square. The light scarce sufficed to the painter's work. John Joseph, too, seemed ailing, and required all her spare time. A week went by utterly uneventful and silent as Angelica nursed her father and tended him. Everything that had happened seemed almost to pass from her mind. It was not, could not be true, she sometimes thought, as the days went by, while she sat painting in her house in Golden Square. She was not doing her best work at this time. How was it possible, as she sat listening to every step, starting at every post and scrap of paper?

One stormy day Mariana brought in a letter which had been left at the door.

It was blotted with ink and with rain, and oddly spelt. Angelica herself wrote a pretty and delicately-lined handwriting,

and she was a little disappointed by the look of this clumsy manuscript.

"Wait, my idol," it said. "The time is not yet come. You may be summoned to the queen in a day or two. This I have on good authority. Then will be the moment to disclose our marriage. I shall join you at Windsor.—Yours till death, DE HORN."

This was all—a mere scrap to exist upon; but Angelica was of a bright and hopeful disposition. She thought well of life on the whole, and though all was uncertain, and the skies clouded, and the winds rose, and though winter had suddenly broke in upon her warm sunshine and tranquillity, she hoped on, and wove her fancy pieces, and secretly enjoyed her dignities. A countess! What would old John Joseph say when she told him? He would surely, surely forgive the deception. One day she could not help asking him if he should like her to marry a high court-gentleman, and live among the great.

"Eh! my child, who can say! Nothing is impossible," said the old man. "My little Angelica will have to take her old father with her," said the old man, fondly.

"We must never separate, never, father," cried she, flinging herself into his arms.

When the summons to Windsor actually came—as De Horn had predicted it would—old Kauffmann was not equal to the journey, and Angelica set off very reluctantly alone. She left him with little Rosa in attendance. If only Antonio had been there to cheer him she might have minded less.

Antonio was far away. He had travelled rapidly, and was already at his journey's end, thoughtfully pacing a sweet and tranquil sunshine as it flowed along a high terraced walk. From the high battlemented terrace he could look down into a walled garden, with its great pots, and the citron and pomegranate trees. Some lemons still hung to the branches, burning like gold. Some aromatic scent still perfumed the air.

Sounds came from the rippling plain beyond the villa. Oxen were dragging their sweet-savoured loads. Some sound of voices, of the reed that a village Pan was piping to his flock—came floating across the melting Campagna and along the terrace. Antonio, as he walked, could fancy a slight figure drifting—almost hear a gay voice echoing for a moment more clearly than the shepherd's pipe.

Should he find her in that little pavilion at the terrace end? He went up to it, opened the door, and looked in almost expecting to meet the glad flash of the azure he loved better even than those Italian skies. There was no one in the little arched pavilion, only the beauties from its casements spread a sight of all the wonders of Italy rippling to the fragrant horizon. It was all lovely in its dimness, this shadowy land of ilex and of cypress, of tender light and delicate echo. . . . At that moment Angelica, muffled in John Joseph's own cloak, hooded, snooded, shodden with fur, is slowly travelling along the snowy English lanes that lead to Windsor, to the great castle, sumptuous on its hill, to the old straggling city of gables, and of quaint memorials, such as those that belonged to her grotesque and fire-warmed land. Notwithstanding the fires in all the gabled houses, the snow was on the ground, the ice was lying in the pools and on the fields, the flying figures of the skaters were dazzling black across the white when Angelica drove into the town.

Antonio had given full directions, and the chaise stopped at a gabled house in Eton, fronting the castle with the many towers and tall battlements. Some one looked from a latticed window, some one came to a door, there was a sound of the scampering of feet, and, when Angelica, a poor shivering little drifting figure, alighted in the cold twilight, a kind-looking man, in a powdered wig, such as schoolmasters do not wear nowadays, looked out from the parlour. He came forward and welcomed her kindly.

"Welcome, Mrs. Kauffmann. We were expecting you," he said. "Mr. Zucchi's friends are ours. You must be frozen by your journey. Welcome, my dear; let me introduce you to my girls," and he threw open the door and led Angel in upon his arm to a dazzling room, with faces, and firelight, and voices. In her bewilderment she could see nothing at first. By degrees she came to her usual perceptions.

There were six or seven girls—full-grown, handsome young women—in mourning for their mother. Some wore muslin kerchiefs and plain mob-caps. Two of them were powdered and in full dress. One, however, was shaved and wore neither cap nor covering to her head. They all seemed to advance at once. Most of them were quite grave; only the bald one smiled.

"These are my daughters," said Dr.

Starr again, not knowing what else to say. "They all know you by name, and through Mr. Zucchi. Here are Decie, Dosie, Fanny, Alley, Jinny, and Kitty. Patty is not yet come home. You must be frozen. Come near the fire."

"Miss Kauffmann must indeed be cold after her long journey," said the shaved young lady, dragging up a big chair.

"Quite right, Jinny; that is a comfortable arm-chair for her to warm herself in," said the father. "I find a good arm-chair very resting after a long journey."

"We ought to tell Miss Kauffmann at once that a message has been sent from the castle to enquire if she is come. Her Majesty will be ready to sit for her portrait to-morrow at three o'clock," said one of the young ladies. . . . "Are you not frightened to death?" cried Jinny. "La! how terrified I should be if I had to paint the queen's portrait."

After a little pause the eldest daughter proposed to take Angelica up to see her room. She was a very sweet and noble-looking creature, and her colour came and went every time she spoke. "I have had a fire lighted for you," she said.

"Capital thing, a fire, this cold weather," cried the father, striking his hands together. "Take her up, Decie—take her up."

Decie led the way with a simple sort of dignity. Her straight tall figure sailed on before, and Angel followed in silence.

"This is the room Mr. Zucchi likes," the young lady said, opening a low wooden door into a pleasant sloping bed-chamber. "We heard from him yesterday. He had not reached his journey's end. I hope you will want for nothing."

Then three more sisters came in, attended to the fire, brought forward another chair and some hot spiced currant wine, which they made their visitor imbibe. All these young maidens were silent, swift, helpful, and friendly; the bald one was the most original and talkative of the whole party; she was only waiting for her hair to grow to go out to India to keep house for a brother, she told Angelica. Jinny looked on with bright grey eyes while Angelica unpacked her modest wardrobe, her painting-box, her canvas, her palettes and brushes.

Of all Angelica's transmigrations this seemed one of the most curious. Here she was a Calypso established in this quaint household, with this colony of nymphs to tend her and make her wel-

come. When Miss Jinny left the room she stood at the lattice peeping out at wide snowy fields, at the flowing river that crossed between the elms. There, at half a mile's flight, stood the castle rearing upon the height. A live king and queen were actually ruling from the round towers, sending messages to summon her to their court.

As she looked out across the white waste, she saw lights flaming from the casements and from the distant castle itself. Was not she herself a court-lady now—a countess in her husband's right? She laughed as she remembered it all. Some incongruous thought came to her, in between two of Miss Jinny's visits, of her childhood, of the quiet far-away Valley of Coire, with the rushing stream, and of the mother's face looking down into hers, innocent and wistful as she could remember it still. Sometimes Angel had thought of trying to paint her mother's face, but it seemed too dear to paint, too near her heart now. Here were her own eyes to look at in the window-pane, with their new expression, and they seemed to her like her mother's to-night. She stood some time looking into and through the lattice window. The crisp snow was lying on the pond. The beech-trees along the fields were brushing the wintry sky. The little Eton boys were all safe in their various cupboards. She could hear the cheerful voices and heels of Dr. Starr's young pupils trampling up some back wooden staircase that led to their part of the house, which was separated from that which the family and the guests inhabited. The world was white and black. The little houses with their gables were beginning to light up. The people were crossing the bridge that led to Windsor. The river shuddered into blocks of floating ice, and Angel blew on her fingers to warm them before she finished unpacking, and as she blew upon her fingers she saw that she had kept on her wedding-ring, which she usually wore on a chain round her neck. There it was, a sign that her dream was a reality, otherwise she might have doubted the whole thing, so brief, so vague did it all seem. Then some one knocked at the door, and Dosie Starr, the second daughter, came in, tall and blooming as any of the sisters, to bid Miss Kauffmann to come down to tea. She was followed by Miss Jinny ringing a bell. Its loud din seemed cheerful and reassuring. Angelica suddenly determined to give up wondering, to live from

day to day, absorbed by this regular life; it seemed ordered to the minute with a certain homely and yet delightful monotony. What is the name of the country which is farthest from Bohemia? Is it Philistia? This was a Philistia, so gentle, so kind-hearted, so modest in its ways, that the grace of Bohemia itself seemed to belong to it. Dr. Starr, that contented person, was almost worshipped by his daughters. It was pretty to see them about him, listening to his words, attending to his wants. They were all so handsome and so naturally dignified and gentle that, although the house was small, there seemed neither ugliness nor confusion in the life that went on there. Miss Starr, the eldest daughter, attended to the boys; Miss Dosie, the second, took the housekeeping, so the talkative Jinny informed Angelica. "I am the clever ugly one, you know," Miss Jinny announced; "and as none of my sisters could be spared, they have determined upon me to go to the Indies, and to keep my brother's house."

"So you have brothers too?" said Angel.

"We are a perfect constellation of Starrs," cried Miss Jinny; "we have four brothers in India, we are eleven in all. Too many to remain at home, people say, but we could not spare one of us except me perhaps."

"We must wait till your hair is grown to decide such a question," said Angelica, smiling. "I am very glad you are all here, especially Miss Starr."

"Is she not a darling lovely creature?" cried Jinny; "but Dosie and Alethea are just as dear. Poor Kitty is not looking well just now; she is the most delicate, and Patricia has been so busy among her poor that you have not yet seen her. People says she is the handsomest of us all. I think" (here Miss Jinny became confidential) "Mr. Zucchi, though he does not say so, admires her more than any. You have known him for years, have you not?" Angelica could only burst out into a warm rhapsody concerning her friend. They had grown up together. She had never known him do an unkind or dishonourable action. He had a warm heart, and a generous disposition.

"He has been painting our china-closet," said Miss Jinny. "My father met him at Frogmore, where he was decorating some of the apartments. Miss Moser introduced us to him, and all this

year he has constantly been staying with us, and with Mr. Evans."

"Who is Mr. Evans?" asked Angelica, curiously. It all interested her, and even, if the truth were told, she secretly resented the delicate vine-leaves and myrtle-branches that she recognized meandering upon the walls of the old china-closet, which Miss Jinny showed her on their way down-stairs. There were also four figures painted by Zucchi on the ceiling, admirable likenesses of the four eldest young ladies. One held a book, the other held a cornucopia, the third carried a spindle, and the fourth a compass.

"Now I understand his strange conduct," thought Angelica, opening her eyes. As they groped their way by twisting places and dark lattices to the narrow little panelled passage that led to the tea-table, Angelica found a pretty domestic scene in the parlour; a silver kettle hissing, a homely evening meal of silver and honey and oaten cake, spread out hospitably upon the mahogany table. The simplicity and kindness of the household made Angel feel happy at that minute, happier than she had felt since that haunting morning.

Everything was shining, fragrant, somewhat chill, though the fire, of which so much had been said, was burning brightly. Dr. Starr talked of a thaw, but the town was still in its dazzling shroud. The low windows with their diamond panes were marked black upon the whiteness of the snow, which had gathered in little heaps against the hinges. The birds came hopping along the ledges with their puffed breasts. The sisters were sitting down one by one smiling and joking with one another; the Mr. Evans Jinny had mentioned had come to tea. He was helping dark-eyed Miss Dosie Starr with the kettle. Decie, the eldest of all, a long sweet figure, was standing by the fire, apparently watching a plate of hot toast, but secretly far away. Dr. Starr sat at the end of the mahogany table with gleaming buckles, and handsome brown eyes, smiling upon his children. Dosie, the tea-maker, had eyes like his, dark and animated. She was calling out to him gently. There was a certain ability and distinction in all she did, and if she poured out tea or gave out linen, it somehow became an act of gentle grace as well as of duty, in her hands. Alethea, the third sister, was the tallest of the three; it was she Antonio had rep-

resented with a spindle, and in truth this young maiden spun many a silver thread as she sat by her father's side. She had a rare gift for music, and to her belonged the little spinnet in the corner by the window. She had played the chapel organ sometimes, or she listened with music in her eyes when the great throbs passed over the people's heads as the waves of a rising sea. As they are all settling down, the door opens, and the fourth sister comes in—Patricia, with the pale head and the aureole of golden hair. She carries a book in her hand, a book which opens upon heroic stories, such as those which Angel herself had dreamed at times, and which Patricia studies with her father. Dr. Starr is very proud of his girls' attainments, and teaches them himself.

CHAPTER XXV.

AVE CÆSAR.

THE appointment with the queen was, they told her, for three o'clock on the following day. Angel set off in a chair, with an attendant to carry her palette and boxes, with many farewells and encouraging signals from her kind hostesses. The distance from the house to the castle was not great; the bridge was soon crossed, the steep soon surmounted. Peaceful sentinels do not oppose her entrance, and she finds herself within the royal precincts, in the great open court, with the king's palaces and towers, and the king's pleasure-gardens all about; and the gables of the poor knights to typify his bounty, and the king's gloom of cloister for his meditation, and the vaulted chapel windows to light his high devotion.

The bearers stop to rest for an instant. Angelica from her chair can look into the great moat, and through an archway, across the steep court, she catches a glimpse of the whole wide country spreading beyond the terrace. Then the men trudge on again to a door at the end of the inner court, where two footmen in the royal uniform are standing.

Mrs. Kauffmann seems to be expected. She is helped out, her cases are taken from the porter and from the chaise by the attendants; one red-coated footman leads the way, the other follows, carrying her apparatus.

Angelica tripped up the great steps, feeling as if she were some sort of doomed princess at the gates of the ogre's palace. Her heart fluttered; she would

have been thankful to run away. She envied the servant who was calmly following her and carrying her easels and brushes, she envied the sentries who knew exactly what they had to do, and who could not go wrong if they continued walking up and down outside and shouldering their guns. So she mounted, trying to reassure herself with some of her father's adages, and with the remembrance of her visit to the cardinal at Coire.

But that had been nothing like so alarming. Then orange-flowers were in the air, warm winds were blowing, the birds were flying among the nestling trees in the garden, kind priests were resting in the shade. This was so cold, so hard, and chill—the great walls were so massive, the soldiers looked so utterly indifferent. The lovely great view was white with snow and swathed in mists.

She was going to meet she knew not what restraints and difficulties. People whose words and looks must be different from her own, since they inspired all bystanders with awe. Dr. Starr's lectures had not been without their effect on the impressionable Mrs. Kauffmann. It was indeed a solemn privilege to be allowed to depict the sacred and anointed heads.

Cæsar-worship does not end with Mr. Gibbon's history. The altars of Augustus could scarcely have been more fervently served than those of good King George and Queen Charlotte. Eton by tradition was loyal to its ruling sovereign, and Dr. Starr, who was a simple and serious man, had out-traditioned Eton in his devotion. The lively Jinny once got into dire disgrace for some audacious revolutionary sentiments.

"My child," said her father mildly, but earnestly, "what pit is yawning before you? What danger do you not run by allowing such idle words to pass your lips? Innocent laughter I should be the first to encourage; but this is indeed unbecoming censure of those placed by Providence in authority over you: persons called to the rule of a mighty kingdom, and thus entitled to the reverence of the young. My dear child, I am grieved to have to speak so seriously."

Poor Jinny left the room in penitential tears.

Meantime Angel climbs the palace steps.

One or two groups of pages and attendants were standing about, looking not unlike pictures themselves. A page

in the court-dress of the period came forward and politely invited Angelica to follow him.

She was led up a small side staircase, but from lunettes and turns and archways she catches glimpses of the stately stone flight. Then she came at once into a room where the attendants requested her to wait. It was a lofty sunny room, hung with tapestry. Vashti, Esther, Ahasuerus were all playing their parts in the loomed web; the light from the tall windows warmed the place; the soft tints of the great carpets seemed to float upon the walls as dreams half defined. Through the hall windows came the December sunlight. It fell upon the great paved court below.

Angelica's very natural emotion and agitation at the thought of the ordeal before her extended itself to all the inanimate objects round about her, and gave a certain life to the figures as they met her gaze. Over one door hung a Queen Mary in her pathetic veil and dress of black, with her sad white face. Esther was on her knees before Ahasuerus decked in her jewels. Angelica thought of her own petition, and wondered whether her request would be granted.

Something more than the mere execution of her picture seemed to depend upon this interview. Safe in her pocket she carried that letter from De Horn, reminding her that she had now his interests to consult as well as her own. "Perhaps," thought Angelica, not without terror, "his whole future career may depend upon the excellence of my likeness of her Majesty."

She started, hearing a sound; it was not the queen, but some attendants who came and removed the easel into an adjoining room.

This was the Vandyke room, where Angelica was finally established. The noble army of martyrs were hanging on the walls. King Charles — his children with their sweet eyes — Stratford listening to the letter. . . .

All this sumptuous light and dignity seemed to bid her welcome, and to give her confidence; she seemed to have found a friend now that Vandyke's noble hand was held out to her. She was but a woman, but she too could paint, could rule light and space, call harmonies of colour to her service. Her terrors seemed to vanish as she waited, looking and noting with attentive eyes.

As she looked about she caught sight of herself in the glass inserted in a long

shutter, and was struck by the expression of her own features. "Surely I can depend upon myself," she said. "It is not for nothing that I have my gift, my inspiration." The lady in the glass opened her eyes in response, and Angelica suddenly saw a second figure reflected there, and turned overwhelmed with shame to meet the queen. She could only stand against the wall in silent confusion. . . .

The interview ended more prosperously than it began. So Angelica told them all when she came back to the gabled house.

The queen had been most gracious, had made no allusion to the looking-glass, smiled, had praised her work, had appointed a second sitting for the following day.

The king himself, in his blue coat, had come in.

"What did he say?" asked Jinny and Dosie. "Tell us quickly!"

"Shall I tell you?" said Angel, smiling. "He said, 'Ah! very good, very good indeed, Miss Zimmermann! Paint a great many pictures, hey?'"

The sisters looked a little disappointed.

"Why, papa himself might have said as much!" said Miss Jinny. "He has been asking for you. He brought in a letter somebody left. Have you seen it, Miss Kauffmann?" and Jinny began looking about the sideboard shelf and the chimney-ledge.

"Is that your father's handwriting?" said the young lady, inquisitively, as she found the letter. "I suppose it is a foreign writing."

When Angelica saw the writing she turned somewhat pale, and almost immediately left the room. Then she ran up-stairs to her own chamber and shut the door, and slipped the bolt. Then she stood up in the middle of the low latticed room, and, with a beating heart, read the crooked lines by the twilight that came through the lattice. At first she could scarcely see them for agitation: —

"MY ADORED WIFE, — The time is at hand for all to be disclosed. I need no longer try the noble patience you have hitherto shown. Expect me in the course of a few days. When I come you shall confide all in the queen, and she I know will befriend us. Believe in my unchanging devotion, and forgive the wrongs I may have done you.

"Devotedly yours till death,
"F. DE HORN."

She read — she read again. Was she disappointed?

Angelica could have wished that her instructions had been a little more explicit; that her mysterious husband had said something more definite about himself, about the wrongs even to which he alluded, that he had given his reasons for secrecy.

She was vaguely excited, vaguely disappointed, provoked, bewildered. She knew not what to think, as she turned this piece of paper in her hand. Her eyes filled with tears—heavy, burning tears—that fell upon the letter, which, to tell the truth, had cost its writer many a struggle, for the count was not handy with his pen.

Poor little thing, crying in the twilight! The tears relieved her heart, until she dried them to the sound of one of the summoning bells.

As the evening went on the sisters gathered round Alethea's instrument, and Angel joined in the chorus they were practising. They all listened, with expressive looks of admiration, to her beautiful voice. At one time she had seriously thought of making music her profession. Her voice was lovely, and her method was excellent.

They made her sing by herself when their chorus was ended, and she tried to remember some of the peasant songs from her native Coire. There was one upspringing melody, with wild, sweet wings (so it seemed to Miss Dosie, who was listening in the window). The music seemed to carry them all away into some distant life, to bring the wide rural freshness of natural things into the shining little English parlour; to bring the breath of wild thyme, the rush of streams, the peace and uplifting of nature upon them all, still bound in their prim conventional order. Angelica's own heart was eased as she sang. She herself seemed to be suddenly convinced. It was a resurrection of hope, of reality, striking into this harmony of sound, and expressing the sympathy of all true souls. The notes met, embraced with heart's gladness, struck their chord, and died away from all their ears.

Miss Jinny had been laughing and crying in her corner. When Angelica finished she rushed up and kissed her vehemently, saying, "You are a dear creature!"

From The Popular Science Review.
THE COLORADO POTATO-BEETLE.

BY W. S. DALLAS, F.L.S.

IN ancient times men noted especially the injuries done to their property by their larger and more powerful enemies. It was the boar that came out of the wood to lay waste the vineyard, and the wild beasts of the field that ruined the hopes of the husbandman. At the present day, in all civilized communities, the number of such destroyers is greatly limited; but on the other hand we are compelled to recognize a multitude of minute enemies, which make up for their smallness by their great abundance, and perhaps are all the more mischievous by reason of their individual insignificance. Among the foes of the agriculturist which have come into notice of late years, the insect which has been called the "Colorado potato-bug," has not only attracted a good deal of attention in America, where it has inflicted serious injury on the potato-crops, but has also raised considerable apprehensions on this side of the Atlantic; circumstances which may justify us in giving some account of its appearance and natural history.

This beetle was discovered by Messrs. Say and Nuttall during an early American exploring expedition in what was then known as the "Far West," on the banks of the Upper Missouri, towards the foot of the Rocky Mountains. It was described by Say in the third volume of the "Proceedings" of the Academy of Natural Sciences of Philadelphia, published in 1824, under the name of *Doryphora 10-lineata*. For many years afterwards nothing was known of it except that such a beetle did exist, its true home being among the Rocky Mountains, where it feeds upon a wild solanaceous plant (*Solanum rostratum*, Dunal) peculiar to that region. But during all this time the advance of a civilized population was going on with astonishing rapidity in the direction of the Rocky Mountains, converting the vast region west of the Mississippi—which in 1824 was still a wilderness inhabited only by Indians and hunters—into a more or less settled and cultivated tract, and the settlement of the territory of Nebraska carried cultivation, and with it the potato, into the district inhabited by the *Doryphora*. The insect was not long in taking advantage of the abundant supply of suitable food thus offered to it. In fact,

we may with some justice assume that it found in the cultivated potato a nourishment better adapted to its wants than that furnished by the native plant on which it had previously fed; for it seems to have set out almost immediately in the direction of the more highly cultivated districts, and spread eastward with great rapidity.

In the year 1859 it was still far west, being then at a distance of one hundred miles west of Omaha City, in Nebraska; but within two years (in 1861) it reached the state of Iowa, over which it spread completely in about three years, and in 1864 and 1865 did great mischief to the crops. During these years the beetles were also very destructive in the state of Missouri, and in 1864 and 1865 they crossed the Mississippi and invaded Illinois in great force, causing much injury to the potatoes in the north-western part of that state. A branch migration northwards commenced in 1862, when the beetle made a settlement in the south-west corner of Wisconsin; by 1866 it had spread over the whole state. During the next two years it completed its occupation of Illinois, and in 1867 passed thence into Indiana and the south-west angle of Michigan, where it was very abundant in 1868. In this year its presence was noted in Pennsylvania, but it was not until 1871 that the Quaker State was fairly invaded by the western beetle. In this year the beetles swarmed about Detroit, at the south-eastern angle of Wisconsin, and great numbers of them are said to have been carried down with floating rubbish and on board ship into Lake Erie, to be wafted along that sheet of water and landed on the Canadian shores, and on the shores of New York and Pennsylvania at the opposite end of the lake. In 1871 also it was reported as doing mischief to the potatoes in Ohio; and in 1873 it had crossed Pennsylvania and reached the District of Columbia, near Washington, and almost to the shores of the Atlantic near Baltimore. In the mean time the northern migration had carried the pest through Wisconsin into Minnesota and Dakota; and through Michigan into Canada, where it made its appearance in 1870. Its transportation into Canada was in part effected by means of the shipping on the lakes. In the south also Kentucky and Western Virginia were invaded in 1871 and 1873.

In the year 1868, when the western potato-beetle had reached the centre of In-

diana, Mr. B. D. Walsh estimated the rate of its advance at about sixty miles a year, and upon this foundation predicted that it would reach the Atlantic coast about 1878. The insect has contrived by some means considerably to outstrip the prediction, and between 1871 and 1873, at any rate, it must have passed over nearly three hundred miles of country. This astonishing rate of progress can hardly be due to the insect's own exertions, and it seems probable that the rapidity with which it appears to be spreading in the densely populated eastern states must be owing to the increased traffic in these districts offering additional facilities of artificial transport.

A striking point in the history of this unwelcome occupation of the cultivated low grounds of North America by a mountain beetle is that it has taken almost a direct easterly route across the continent, and that its advance has been at all times more rapid in the northern than in the southern districts. The American entomologists who have written most fully upon this beetle, Messrs. Walsh and Riley, remark especially upon this point; and the former compares the advance of the insects through Illinois to that of General Sherman's army in the late war, and says that "the southern columns of the grand army lag far behind the northern columns."

According to Mr. Riley this peculiarity is to be accounted for by the supposition that the western potato-bug being essentially an alpine species, thrives best and therefore spreads most rapidly in the cooler northern regions, and this view is borne out by the fact that even in the north a very hot summer destroys the insect.

Of the actual extent of damage done to the potato-crops in the districts which have been visited by these destructive insects we have no precise information, the only approach to an estimate being that of Mr. Walsh, who stated the probable loss by this cause in a small district at about 1,750,000 dollars. From the nature of the case, it is perhaps almost impossible to arrive at any exact computation. Nevertheless, the statistics published annually by the United States Department of Agriculture seem to indicate a falling off in the potato-crops, which may be due to the ravages of the *Doryphora*. Thus, the total production of potatoes in all parts of the United States was as follows:—

	Bushels.	Acres.	Average per Acre.
In 1868	106,090,000	from 1,131,552	94 Bushels.
In 1869	133,886,000	" 1,222,250	109 1-2 "
In 1870	114,775,000	" 1,325,119	86 "
In 1872	113,516,000	" 1,331,331	85 "

The year 1869 seems to have been an exceptionally favourable one for the growth of potatoes in all parts of the Union. Indeed, in Michigan, which had already been invaded by the Colorado beetle, the yield reached the enormous average of 155 bushels per acre. But when we examine the production of the individual states, taking some in which the western potato-beetle had made its appearance in force in the above years, and others which had either remained uninvaded or been only partially attacked at the same time, we get the following as the average produce per acre in bushels:—

	1869.	1870.	1872.
New Hampshire . .	150	88	94
New York	114	98	88
Pennsylvania . . .	93	87	99
Missouri	115	103	80
Illinois	103	81	75
Ohio	112	72	80
Michigan	155	95	66
Minnesota	112	57	99

In general terms, we may say that the falling-off is greater in those states which the beetle had fully occupied; but it is evident that other causes of fluctuation must be at work to give rise to the variation in the amount of produce. Still, although the mischief done by the beetle may have been exaggerated, it is certain, from all accounts, that it is by no means inconsiderable, and the recovery of the crops in some of the states which suffered most from the early visitation of the insect is directly ascribed by the government statistician to the vigorous warfare which has been waged against it by the farmers.

The beetle which has inflicted so much damage, and caused so much alarm in the United States, that the prospect of its succeeding in crossing the Atlantic has raised almost a panic in some European countries, is by no means a formidable animal to look upon. It is a beetle of the tribe of Phytophaga, or plant-eaters, and of the family Chrysomelidæ, all the members of which are of small or moderate size, of a rounded, ovate, or oblong convex form, with the head short and deeply sunk in the next segment (prothorax), the antennæ generally thread-like or beaded, and only of moderate length, and the tarsi (feet) with only four apparent joints. The insect, as already

stated, was described in 1824 by Thomas Say as belonging to the genus *Doryphora* ("spear-bearer"), in which the meso- and meta- sterna are produced forward into a spine; this is the origin of the name of the "ten-lined spearman" given to the insect by Mr. B. D. Walsh. The genus *Doryphora* has been considerably subdivided by recent authors, and by some entomologists the species under notice is referred either to the genus *Polygramma* of Chevrolat or to *Leptinotarsa* of Stal, in which the sternum is unarmed; but it will be sufficient for our present purpose to speak of it under the old name of *Doryphora decem-lineata*.

The perfect beetle measures from two-fifths to half an inch in length, of an oblong-ovate form, and of a tawny or yellowish-cream colour, adorned with numerous black spots and stripes. Of the former, a very peculiar group, consisting generally of eighteen, occupies the upper surface of the prothorax, or segment immediately behind the head. These consist of two elongated spots or short lines in the middle of the surface, a row of four small spots along the hinder margin, and usually six similar points on each side of the two middle ones. On the wing-cases (elytra) we see ten black stripes, five on each—namely, one close to the line of junction of the two wing-cases, and one close to the outer margin, both of which stop rather far from the apex of the wing-case, and three between these, reaching nearly to the tip. The edges of all these black stripes are irregularly punctured, the punctures being partly on the stripes and partly on the intervening pale surface, and the second and third stripes from the suture are in contact with each other at the base and apex. The legs have the knees and the feet (tarsi) black. Beneath the elytra the insect is furnished with ample membranous wings, which it uses freely, and they are described by American entomologists as of a fine rose-colour, and as giving the beetles a very beautiful appearance when flying in the sun.

The species appears to be pretty generally diffused in the Rocky Mountains, from the eastern slope of which it has invaded the cultivated regions by the course already described. Although found in the Colorado territory, it is by no means peculiar to that district, and the name of "Colorado potato-bug" commonly given to it does not indicate the locality from which it set out on its eastward journey.

Although several American entomologists of repute (such as Messrs. Walsh, Riley, and Shimer) have devoted considerable attention to the habits of the Colorado potato-beetle, its history, at least in one important point, has not been very satisfactorily worked out. There appear to be three generations of the beetles in the year. In the spring, when the potato-plants are quite young, the perfect insects produced from the last generation of the previous year lay their eggs upon the under surface of the leaves in small patches of from twenty to thirty together. The number of eggs produced by each female is said by some writers to be from 700 to 1,200, but this is probably an exaggeration. The eggs are of a yellowish colour. They hatch in about six days. The larvæ, which are at first of a reddish colour, grow rapidly, and become lighter in tint (of a more or less reddish cream-colour, or orange); they are full-grown in from seventeen to twenty days. In the mature state the larva is a thick fleshy grub, about half an inch long, having the head and the anterior segments narrow, the first three segments of the body furnished with jointed legs, and the extremity of the abdomen with a short process (anal proleg), which serves the animal as an additional limb in adhering to the plants on which it feeds. The head, the hinder margin of the first body-segment (prothorax), and the legs are black, and two rows of black spots are to be seen along each side of the body.

In many, if not in most of the insects belonging to the family Chrysomelidæ, the anal proleg of the larva serves another purpose besides that of assisting its progression; it produces a viscid secretion, by which the larva fixes its tail to the surface of a leaf or other object before passing into the quiescent pupa state. There has been some discussion among American entomologists as to whether the western potato-beetle ever employs its proleg in this manner, and the question does not seem to be quite satisfactorily settled; but Messrs. Riley and Shimer—the former of whom claims to be the first who ascertained the history of the insect through all its changes—maintain that it never undergoes its pupal transformation attached to the plant on which it has been feeding, but always descends to the earth, and under its protection sleeps out the pupa stage. In this state the insect is a small oval body, roughly showing at its sur-

face the forms of the various organs of the perfect beetle (head, legs, elytra, &c.), folded together and confined by a skin, which will be thrown off when it emerges as a beetle. The insects of the first and second broods of each year remain in this condition ten or twelve days, when they issue forth as perfect beetles, and the females quickly proceed to lay their eggs upon the potato-plants. How long the pupæ of the third or last brood continue without further development does not appear to be very clearly known; but all recent observers agree that the perfect insects are produced before or during the winter, and that they remain underground until the spring. It seems to be certain that the beetles are found fully developed in the ground during the winter, although their descending to a depth of eight or ten feet, as stated by Mr. Riley, seems quite incredible, considering the form and structure of the insect. The same writer, however, says that they seldom go down below eighteen or twenty inches; probably they generally remain within the portion of ground which has been broken up in digging the potatoes, as this would furnish them with ample protection against the direct influence of cold, and the beetles would have no difficulty in making their way between the clods to a suitable shelter.

A curious quality has been ascribed to the Colorado potato-beetle, and, according to Mr. Riley, upon authentic evidence in some cases. They and their larvæ are said to possess poisonous properties which have been known to affect people handling them, and to produce serious illness in those who have inhaled the vapours given off during the operation of scalding large quantities of the larvæ, or burning potato-haulms infested by them. Even the birds and domestic poultry were said at first to refuse to eat them; and in one report we are told that the prairie-hens alone would touch them, but that the flesh of the birds was rendered so unwholesome by this diet that it could no longer be eaten with impunity. We may suspect some exaggeration in these statements, especially as we find at a later period of the visitation that several farmers found their fowls feed freely upon the larvæ, and even recommended the cooping of chickens in the potato-fields as a means of checking the pest. Other birds also have probably accustomed themselves by this time to the taste of this novel food; at least, it has been observed in some parts of Iowa that

the rose-breasted grosbeak (*Guiraca ludoviciana*) feeds freely upon the larvæ, and although this bird was formerly rather rare, it has now become plentiful in the district.

But if the birds have been inclined to fight shy of the western beetle, it has met with an abundance of insect foes in the course of its invasion. Among those which have rendered themselves prominent in this warfare, several species of lady-birds devour the eggs of the beetle; a tiger-beetle (*Tetracha Virginica*), and several Carabidæ, eat the larvæ; a wasp (*Polistes rubiginosus*) carries them off to its nest to furnish provisions for its young; an Asilide fly (*Promachus Bastardii*) and several species of true bugs (*Rhynchota*), especially a *Harpactor* and an *Arma*, pierce the larvæ with their beaks and suck out the juices; whilst a Tachinide fly (*Lydella Doryphoræ*, Riley) attacks them by the insidious method of parasitism, depositing an egg upon the surface of the larvæ, generally near the head, and the young parasite produced from which burrows into the body of the victim and feeds upon its substance, not destroying it, however, until after it has descended to the ground when full grown. A long-legged spider or harvestman (*Phalangium dorsatum*) is also described as feeding upon the larvæ in some districts; and the beetle has been found infested with adhering mites like those so constantly seen on our common dung-beetle (*Geotrupes*).

From the published reports it would seem that these insect enemies of the potato-beetle being mostly natives of the soil, have exerted their powers of destruction so vigorously against the western invaders as to have greatly checked their multiplication, the numbers of the carnivorous species having increased with a rapidity proportionate to the abundance of nourishment offered to them. In the long run probably a balance would be arrived at between the contending forces, but in the mean time the crops would be seriously affected, and the country would still always be liable (like our hop-gardens) to the occasional excessive multiplication of the destructive insects. Indeed with every confidence in the ultimate establishment of a balance of power between the western beetle and its enemies, the farmer could hardly be expected to look on with equanimity while his potato-fields were being ravaged; and it is not surprising

to find that the most various methods — some most absurd, others more or less judicious — of getting rid of the pest, should have been adopted. Of actual remedies — that is to say, means of destroying the insect after it has taken possession of the potato-plants — the best seem to be the use of sweeping and beating nets, or substitutes for the latter, into which the insects are beaten by some implement, such as a flat broom, and the dusting of the plants with a poisonous powder composed of Paris or Scheele's green (arsenite of copper), mixed with from twelve to fifteen times its weight of flour or plaster of Paris. It is found that the use of this poison does not render the potatoes produced by the plants treated with it unfit for food, but it seems still to be doubtful whether the potatoes grown afterwards in soil upon which it has been employed are not injured in their quality, and Mr. Riley strongly recommends that it should be used as sparingly as possible. In his opinion, the most valuable remedial measures consist in the adoption of certain precautions in the selection of sorts for planting, and especially in the exercise of great vigilance in the spring of the year, placing in the newly planted fields small heaps of potatoes to which the beetles are attracted on emerging from the ground, and from which they may easily be gathered every morning, and destroying as many as possible of the eggs and young larvæ of the first brood. By these means it would appear that the increase of this new scourge of the potato may at least be considerably checked.

At the same time there is one circumstance in the history of the insect which will probably stand in the way of its being effectually controlled. In their progress through a civilized country the beetles have cast off the simplicity of their western ancestors, and having once changed their food-plant, have now tried many other articles of diet, and found some of them highly congenial to their taste. Besides various Solanaceæ growing wild, they have been observed feeding on species of *Echinosperrum*, *Amaranthus*, *Helianthus*, *Cirsium*, *Stygnbrum*, *Polygonum*, *Chenopodium*, *Eupatorium*, and *Hyoscyamus*, and on grass, oats, the red currant, and even the cabbage. This plasticity of appetite, if it may be so termed, acquired by an insect which, in its original home, seems to

confine itself strictly to one species of plant, is a fact of considerable zoological interest.

But this is not the only curious point in the natural history of the Colorado potato-beetle. It undoubtedly started on its eastward migration from the lower parts of the eastern side of the Rocky Mountain range, and probably the direction of its movement has been governed to a certain extent by that of the prevalent winds. But it is singular not only that the *Doryphora* is unknown as a potato-eater west of the Rocky Mountains, but that according to the testimony of the inhabitants of the Colorado territory and other elevated parts of the range, the beetle is there perfectly true to its original food-plant (*Solanum rostratum*), even in localities where potatoes are cultivated. And this fact becomes still more remarkable when we learn that the older states, especially towards the south, are inhabited by a species of *Doryphora*, very nearly allied to the potato-beetle, which feeds upon the so-called horse-nettle (*Solanum Carolinense*), and has never yet been known to attack the cultivated potato, although grown in its neighbourhood for many years. This beetle, which has received from some American writers the euphonious name of the "bogus Colorado potato-bug," from its having been frequently mistaken for the true malefactor, is the *Doryphora juncta* of Germar. It agrees closely with the *Doryphora 10-lineata* in size, form, and general character, having the same number of black spots similarly arranged upon the prothorax and the same number of black stripes upon the wing-cases; but it may easily be distinguished on close examination by its having the black stripes of the elytra margined by an impressed line (stria) containing a single row of punctures; by the third and fourth stripes, counting from the suture, being united at base and apex; and by the legs being entirely pale, except a small black spot on the middle of each thigh in front. The larva also, although very similar to that of the potato-beetle in form, is of a lighter colour, has the whole of the first body-segment (prothorax) black, and only a single row of black spots along each side of the body. The presence of these two beetles side by side in the United States, their close agreement in external characters, and their difference in habits, may be expected to open a wide field of investigation in connection with the question of

the origin of species. We may obtain some valuable data if American entomologists will carefully collect every year specimens of *Doryphora 10-lineata* from various localities, so as to compare them, after some time has elapsed, with specimens of the same species from its original mountain home.

There is one other matter in connection with this new foe to the potato which must be alluded to here; namely, the chance of its being introduced into Europe. Considering the alarm that the gradual advance of the potato-beetle has produced in America, it is not surprising that some apprehension should be felt on the subject on this side of the Atlantic, or that the authorities of some Continental states, to which the importation of American potatoes is of far less consequence than it is to us, should be debating the propriety of prohibiting all such importations. But if we consider the natural history of the beetle, as already described, it will be seen that there is little cause for apprehension upon this score. At the time of digging the main crop of potatoes, the insects will certainly be in the ground, probably in the pupa state, and if so a little care in washing them clean from all adherent soil before shipment will suffice to remove any pupæ which may by chance be entangled in the earth. The perfect beetles will be still less likely to be transported with the potatoes.

The real danger for Europe, as Mr. Riley has pointed out, consists in the possibility of perfect beetles, especially fecundated females, finding their way on board ships or steamers bound across the Atlantic; and the experience of the transportation of the beetles by means of trading-vessels across the lakes from Michigan into Canada and the eastern states, shows that there is at least a possibility of their being introduced into Europe by similar means. This is a possibility against which no custom-house regulations, and indeed no official vigilance of any kind, can guard, and the only precaution that we can take is that recommended by the excellent American entomologist just cited; namely, the circulation among seafaring men and the inhabitants of our western shores, and the posting-up in the cabins of sailing-vessels and steamboats, of correct descriptions and coloured figures of the beetle, with the request that any one seeing such a creature on board ship or elsewhere should immediately destroy it. Consid-

ering the magnitude of the interests involved in this matter, although perhaps there may be no great cause of alarm, it is not too much to expect that the government should co-operate with the various agricultural societies in spreading trustworthy information about the western potato-beetle throughout the country, and also take steps to carry out the suggestion of furnishing ships trading to America with conspicuous notices of the kind alluded to above.

From Fraser's Magazine.

GERMAN HOME LIFE.

BY A LADY.

MANNERS AND CUSTOMS.

THERE is no subject so difficult to treat fairly as the manners of our neighbours. The salient characteristics of nations and individuals are seldom their most pleasing ones, and it is too much the tendency of criticism to wear the garb of blame. Many of us unconsciously share the prejudices of that enlightened traveller who declared in disgust that, could he have conceived it possible that the Continent would be so unlike England, he would never have gone abroad. Of course "unconsciously," for this is pre-eminently the age of internationalities and enlightenment, and we are all eager to compare, to learn, to select, and to survive as specimens of the fittest. Still we *do* slip that narrow gauge, called prejudice, like a little travelling-thermometer into our coat pockets, and pull it out only too readily upon the smallest possible provocation, with a nod of triumph or a chuckle of silent satisfaction at the superior state of our own social atmosphere.

We have in a former paper adverted to the want of manner that jars upon us in ordinary German life. On the other hand, our scrupulousness as to form, our dismay at the want of refinement that is only too common a table trait amongst our Teutonic friends, is looked upon by some amongst them with contempt; they regard it as a finikin fastidiousness that betokens alike affectation and effeminacy, and betrays a smallness of mind that practically precludes the possibility of a just judgment. They tell us that we lay too much stress on the unimportant details of manner, and that we should judge

a man by his merits, and not by his "nice conduct of a clouded cane," or the way in which he cuts up his food and conveys it to his mouth.

Such persons adopt an aggressive coarseness of behaviour, supposing it to denote a fine independence of the shams and conventionalities of life, and it is in vain you would try to persuade them that a man may combine eminent talents, incorruptible integrity, and the purest republican principles with some regard for the amenities of civilized life and the feelings of his neighbours. We all remember Thackeray's story of the man who rescued him from brigands, and lent him 1,700*l.*, but whom he felt himself obliged to cut, having met him later at a *table d'hôte* where he was seen to convey peas to his mouth with the assistance of his knife; and how he goes on to relate that he saw the charming princess of Potztausend-Donnerwetter performing hideous feats of knife-jugglery at the royal table of her illustrious relatives without blushing, but how and why, in her case, he condoned the otherwise unpardonable offence. It has happened to the writer of these pages to sup, more than once, at royal, serene, transparent, and impalpable tables, where the service has been of fine gold, and the air literally charged with diamonds and decorations, and yet to tremble at the dangerous dexterity of her neighbours as, ignoring the humble merits of the fork and spoon, they performed surprising and audacious tricks with knives of Damascene sharpness. It is only fair to add, however, that for the most part these distinguished personages belonged to a past generation, and that a marked improvement may be observed in the manners of young Germany in this respect. In the houses of the rich, English tutors, governesses, and *bonnes* are popular institutions, and persons of good breeding are quite willing to believe that moral integrity and even intellectual eminence may be combined with seemliness of conduct at table.

I remember once overhearing a charming German lady say to a countrywoman of my own, whose acquaintance she had evidently only casually made at the *table d'hôte* dinner from which we had just risen, "I knew directly you were English; *you ate so prettily*"—a rather unusual style of compliment, but very characteristic, and none the less sincere for the unconscious epigram that lay hid beneath its artlessness. Very present also

to my mind is a droll dinner-scene that threatened at one moment to end somewhat tragi-comically; and, as a little illustration is allowed to be better than a good deal of argument, I will venture, whilst on the subject of table-traits, to record it here.

Scene, the *Vier Jahreszeiten* at Wiesbaden; time, the mid-day *table d'hôte*. The table was crowded, and opposite to our party sat a stern middle-aged Briton, of the iron-grey, wiry-whiskered type; strong as to boots, rough as to travelling-suit, uncompromising as to cleanliness. The whole man cried loudly of brushes, soap, water, baths and bristles. To him enters presently, with much bustle and scraping of chair-legs, a fat, respectable, and (apparently) good-tempered German. He mops his face with a violent-coloured handkerchief, makes various inarticulate noises not usual in polite society, intermixed with such adjurations to things in general as "*Du lieber Himmel! Herr je! Was für eine Hitze!*" and so on. He of the tweed suit and bristling whiskers glances momentarily askance at his neighbour, as who should say "What specimen of humanity is this?" Then slightly drawing his chair aside, and modifying the expression of disgust and surprise that has momentarily illumined his impassive countenance, calmly continues his decorous meal. His neighbour, however, disgusted perhaps in his turn by his exclamations meeting with no response, annoyed, perhaps, by the "stony British stare" of the iron-grey man, overcome by that sense of *tedium vite* which a pause in the service is apt to superinduce in even better-regulated dispositions, runs his hands through his hair, rubs his head on each side, and plunges his not over-clean digits into the dessert-dish nearest to him. He has already cracked and eaten an almond, and is returning for a chocolate-cake, when his hand is suddenly arrested in mid-air.

"*Mossir!*" cries the indignant Briton, grasping his arm as in a vice, and in default of German (it wasn't expected in the army examinations of the period) speaking such French as indignation gave him in that hour, "*Mossir! ne pouvez pas! me faisons mal, mossir, me faisons mal, ici!*" and the honest gentleman laid an expressive hand on the anti-climax of his waistcoat.

"*Shir! misther!*" cries the outraged Teuton (observe, in perfectly understandable, if somewhat eccentric, English), "*shir, you are not von chentlemansh;*

you know not was ish de behaviour; you dreat me like von bigsh."

"Pigs?" shouted Colonel O'Reilly, his yellow Indian face all aflame with hot Celtic blood. "By dash, sir, it's you that have said it; and, by blank, sir, I'm not the man to conthradict ye!" General uproar, scuffle, and confusion. Mine host appears upon the scene and endeavours to pour oil upon the troubled repast. Notes of exclamation, indignation, admiration, and adjuration fly about like hailstones, till at length the more practical of the party remembering that the dinner calls for immediate discussion, whereas the episode may be relegated for post-prandial consideration, the hubbub ceases, and order reigns once more at Warsaw. Colonel O'Reilly, naturally supremely indifferent to being told that he is not a gentleman by an excited German bagman, stalks calmly out of the room, and we have the pleasure of seeing him a few hours later dining leisurely and with dignity, in spotless solitude, at a little round table with mine host in abject attendance. He was evidently of Mr. Emerson's opinion, and "could better eat with one that did not respect the truth or the laws than with a sloven or unrepresentable person."

Speaking roundly, one would say that the German manner is rough. It would almost seem as though there were pride in the unpliability that shocks us. We are, ourselves, not a demonstrative people; we have never been accused of easy manners; but we sin rather by omission than by commission. We are silent, sometimes from shyness, sometimes, it may be, from pride; but as a rule we go quietly through life, and do not pique ourselves on want of politeness or glory in giving an uncouth answer when a civil one would do equally well. Englishmen cannot now swagger over the continent as they did in the post-Waterloo days, and during the halcyon period of the Palmerston premiership. We have been told, more than once, lately that we are politically "nowhere," and that socially Russian princes and American cousins have altogether extinguished us. There has been an ill-concealed contempt of our insularity, an impatient pity of our contractedness, a disgust at our want of martial ardour, a reprehension of our tame turning of the cheek, already smitten, to the smiter, a general reprobation of our feebleness and degeneracy somewhat galling to the spirit of Englishmen. Bluster has hitherto not been greatly es-

teemed amongst us, yet when we have had things to do we have not shrunk from the doing; whatever our policy may be, and whatever our faults as a nation, as individuals we are not cowards. The British traveller is apt to be considerably exercised in spirit nowadays by the repellent roughness, the sort of aggressive "jack in office" manner that petty Prussian officials, in all the inflated self-importance of triumphant red-tapism and successful bureaucracy, are apt to adopt on (or without) the slightest provocation. It is a little hard for a being whose immemorial boast, man and boy, it has been (as it was that of his father before him) that he could "lick" any three given "foreigners," single-handed, to find himself tied to an official string, put in the wrong about nothing, not allowed to put himself in the right and slip the ignominious collar.

On the other hand, we ought to be patient; we ought to recognize in our cousins-german our natural allies, by blood, by religion, by that very earnestness and devotion and thoroughness which have brought about such magnificent results in so incredibly short a space of time. The determination, the silent endurance, the wholesale sacrifice, the un murmuring devotion to duty, the total absence of anything like brag or boast both before, during, and even after the late Franco-Prussian war, are all qualities so dear to our own hearts, so calculated to win respect and admiration from us, that surely we need not be super-sensitive as to the snubs we get now and then from our successful relatives. Because our laurels are somewhat sere and yellow, we should not forget how we felt when the intoxication of victory was ours; and if the Prussian eye has a suspicious glance in it, ready to see affront in the quiver of an eyelash or the tension of a muscle, we should return the questioning gaze frankly and fearlessly, and show no anger in reply. It is natural that the talk of these modern Titans should be somewhat tall, and their demands on our admiration somewhat excessive; we, on our part, should bear in mind that there is trial as well as triumph in the position of the *nouveau riche*, who wakes up suddenly to find himself a *millionnaire*, and is (somewhat unreasonably), expected by society to comport himself as modestly as though Fortune had not turned her wheel, and he were still sweeping out the shop.

Manner, in Germany, varies according to grades and classes after a fashion

quite impossible in England, where there is such a fusion of society that it would be difficult to define with any precision where one class leaves off and the other begins.

You have, for instance, the military manner, which consists in well-squared shoulders, a well-belted waist, a regulation spine, an angular elbow, a click of the heels, a salute that is meant to be at once fascinating and haughty, and a pronounced contempt for everything civilian beneath the grade of a privy councillor or a first secretary. And you have the diplomatic manner, which is refined, lofty, guarded, perhaps slightly mysterious, but at the same time gently unbending, always gallant, often epigrammatic, and generally altogether amiable, easy, and charming. It may be a feminine prejudice, but great statesmen seem to understand better how to treat women than do great warriors. They have not the hand forever on the sword-hilt, there is less command in their eye and more amenity in their glance; the sense of steel and the smell of powder, the ghastly traditions of blood and iron, do not oppress you, as in the presence of these grisly heroes: it is, in fact, easier to bandy words with the greatest of modern statesmen, than to attempt the mildest joke, that might be construed into a slight of his regiment or a slur on his Fatherland, with the feeblest little fledgling of a *Fähnrich*. A diplomatist is seldom above being charmed by a pretty face, a lively manner, or a tasteful toilet; and he pays his compliments so dexterously, and shows his appreciation with such fine tact, that he puts the shyest *débutante* at her ease, and confirms her success before a quarter of an hour has elapsed. But your eagle-crested warrior, to show his stoical disregard of the Capuan luxuries surrounding him, will drag his sword after him, stalk calmly through your train, and when asked to take his spurs out of your furbelows, does it with no more animated expression of regret for the devastation he has caused than might be expected of an automaton.

No doubt the greatest happiness of the greatest number is a sound politico-economical principle; but—away from Berlin—you will hear many a sigh over the snug obscurity of former days, when each little State enjoyed its own social pleasures, and talked of a united Fatherland much as the Mahommedan talks of Paradise, not quite realizing how soon and how far the tips of the Prussian eagle's

wings were to extend beyond their own borders, and safe in sentimental patriotic generalities, of which beer was often the foundation and bathos the outcome.

Nowadays, when Hanover, for instance, is garrisoned by Prussian regiments, when such as have not disappeared into space of the indigenous troops of smaller states are sent far afield to distant frontier-towns, the inhabitants seem much like school-children, bound, under the stern eye of their master, to be on their best behaviour; there is a sense of restraint, a division of opinion, a chafing under "the wounding cords that bind and strain," which look treasonably like regret for the day of small things. The change has not improved the tone of social life; there is an uncertainty, a suspicion, a wavering towards the new, a clinging to the old, that has disturbed the former free, unrestrained kindliness of intercourse. The *suaviter in modo* has suffered on either side. Whilst the weak clamour against the *fortiter in re*, the might which these not too merciful giants declare is their right, they, on their part, gaze on the futile resistance of the protected and governed with a glance not exactly calculated to inspire love in recalcitrant bosoms.

But to return to our theme. We have the legal manner. Not perhaps what, at a first glance, we might expect it to be. There is nothing of the Bacon philosophy or the Burleigh nod about it; judicial calm and magisterial dignity are not its characteristics; on the contrary, it is, taken in the aggregate, brisk, clamorous, pert, and persistent; it tells of the would-be-orator, member of Parliament, minister, statesman, regenerator of his country. Some years ago, when every little local advocate had something to say as to the grievances of Reuss and Greiz, when the Bergrs and the Bachs had their boundaries, and the Krahwinkel cock crowed the loudest of all, there arose upon the political horizon of Germany a figure, heroic in its massive muscularity of outline, and wielding the battle-axe of despotic authority with almost Berserker wrath. Prince Bismarck, then simply Herr von Bismarck, the hated and despised of the popular party, was already famous for his grim and terse comprehensiveness of expression. He had just done a magnificent silent stroke of business with the prime minister of another country, and as he bade him farewell, remarked in his own quiet way, "And now I am going home to sit upon the lawyers!" Nothing

could be more trenchant; but one must, perhaps, have lived in Germany *pour bien goûter la plaisanterie*.

Again, we have the professional manner, of which the exponent parts are popularly supposed to be spectacles, indifference to the ordinary subinary affairs of life, and an unlimited faculty for evolving camels (or anything else) out of that inner consciousness which furnishes the owner with a never-failing supply of happy abstractions. Yet who that has lived in Germany will hesitate to take off his hat, and stand bareheaded in respectful admiration of that modesty of manner, that singleness of purpose, that simplicity of mind, which distinguish her great men? Whether artists, philosophers, poets, or physicians; whether nature claims them as her own, or art or science say, "These are mine," they go their silent way, looking neither to the right hand nor to the left, not expecting admiration, not claiming recognition, scarcely desiring reward; certain only of one thing, and happy in the certainty that if they labour with love, if they do good work for the work's sake, they will not have lived in vain. We may laugh at their helplessness, their absence of mind, their careless costume, their want of *savoir vivre*, but it is with a tender laughter that savours more of love than ridicule; that is aware of its own folly, and is mentally conscious that it only ripples round the feet of these great ones, whose heads have already struck the stars. There is an utter absence of all self-consciousness or grimace about them; and if we criticise their outer men it is with the banter of affection, just as we keep our little playful familiarities for those we love best at home, and cut our feeble jokes upon the peculiarities and characteristics of our favourites.

Again, there is the student-manner, in contemplating the antics of which we seem to be conning a page out of some chronicle of the Middle Ages. Its jack-boots and rapiers, its long hair and embroidered breeches, its pipes and beeriness, its sliced ears and slit noses, its smoking-bouts and drinking-orgies, its unions and guilds and wild minstrelsy, are so many anachronisms. These noisy swashbucklers, whose hands are forever on their rapiers, whose creed is a word and a blow, whose favourite butt is the decorous citizen, who jeer at the Philistine virtues, and use the world as abusing it, are a rather terrible class. They pride themselves on this super-exuber-

ance of youth, and do not hesitate to play any pranks that suggest themselves should genial inspiration move them to midnight wassail, but, fortunately for the non-student world, time puts a merciful period to these follies, and even the wildest *Bursch* cannot carry his peculiar traditions into social life with him.

In a country where coronets and quarterings are counted up as cardinal virtues, where the pretensions of the *canaille* are cavilled at, the *bourgeoisie* snubbed, the noble divided from the "ignoble," even in the ranks of the theatres, and where, without a title, you cannot go to court, we are sure to find a vast amount of etiquette; but (my German friends will be angry with me, I know) we must not expect too much politeness. When we come to speak of language we shall see that the cumbersome phraseology of etiquette counts for more than that simple politeness of the heart, which is but the sublimated abnegation of self that marks the manner of the true gentleman. Again, when we come to speak of woman, her position and her work, we shall see how much more fortunate are we than our German sisters in these particulars; how much more tenderly we are treated; how far greater a liberty of action is allowed us, and how fair and free are our lives when compared with theirs.

It is true that a larger social horizon is opening for Germany; the partition of class-prejudices must fall as the sphere of action is widened, as men learn to see that all work is honourable if undertaken in an honourable spirit, when bankers and merchants will cease to be, as is now the case, almost exclusively Israelites; when younger sons will don the robe and assume the cassock, and cure the sick, and acknowledge that the office dignifies the man at least as much as the man dignifies the office. Until then, perhaps, the roughness of manner, the *want* of manner that shocks us in the mass of the German middle class, will keep noble and simple apart. It scarcely can be otherwise; yet all who love Germany must long for the day when a wider and more liberal view in these matters shall be hers, and when progress and development shall have cast forever in the background that petty personal view of things which for long years kept her small despite her innate elements of greatness.

But, before I pass away from the subject, let me say a word of that true-hearted, simple, childlike manner that belongs

to no class, that is independent of rank or profession, that wins your confidence, that makes your heart warm within you, that shines like truth itself out of the honest eyes that are looking into yours, and clasps your hand in blameless brotherhood. Even as I write these words a scene rises before my eyes of a long garden-parlour, with windows that look on the one side into the dusty poplar-bordered road, and on the other across a rough grassplat, where the great walnut-tree makes a chequered shade, and the old sun-dial is marking the silent hours. Two children, a boy and a girl, are sprawling on the bare floor; the afternoon is hot, and they are tired of play out of doors. Somewhat fretful, as is the manner of their kind under such circumstances, they fling their arms and legs to and fro, and stare at the window. Suddenly the Herr Professor passes at a swinging trot; he is going to his Kegelclub beyond the town-gates; but he catches a glimpse of the two little red, discontented faces, and turning in, takes a book from the table, and without further greeting or preamble begins to read. With chin in hand, and eyes big with wonder and expectation, the children gaze up at the Herr Professor (his name is known all over the civilized globe) as he tells them the immortal *Märchen of Aschenbrödel*. When he comes to —

Rück i di gück
Blut ist im Schuck,

the eyes grow rounder and the gaze more intent. The humorous manner, the dear kindly voice, hold others enthralled besides the little unconscious sensualists. Ah me! it is all over now, I went there the other day, and they had put a smart new storey on the top of the summer parlour: a Tivoli had been instituted opposite, and the tum-ti-tum of the drum and the tootle-tooing of the cornet made night hideous. Where the walnut-tree stood, a cockney summer-house flaunted in gimcrack splendour, and the dear old sun-dial had disappeared altogether from the face of the earth, out of love with the changes that told the "times were out of joint." The story was told; Cinderella had driven off with her prince in the pumpkin chariot; the wise kind eyes were closed; the voice we had loved was silent; and out in the churchyard, *extra muros*, the busy brain was resting from its labours, and a *hic jacet* told us all that remained to tell of the story.

Of that reticence of manner which we are apt to consider as one of the essentials of good-breeding our cousins-german know nothing. As a rule all classes talk at the top of their very powerful voices; no man waits for his neighbour to finish the observations he has begun; he shouts in reply as though the main object were to be heard at any cost. Take a *café*, a steamer, a railway-carriage, any place of public resort where two or three Teutons are gathered together, and the result will be vociferous. That finer instinct which teaches the talker to lower his voice in a picture-gallery or a public garden, and produces a pleasant hush in clubs, reading-rooms, and theatres, is entirely wanting here. There is nothing to be ashamed of in what they are saying; any one may hear it; what need to make a mystery about why you are parting with your nursemaid, or what you are going to have for dinner?

Nor, as a rule, will the publicity of Rhine steamers, railway-carriages, Danube boats, or post-waggons in any way moderate the demonstrations of affection with which many of your fellow-travellers will beguile the way. It is quite customary for betrothed couples to exchange the most intimate endearments, sitting enlaced in each other's arms, beneath the very noses of their respective *Frau Mamas* and *Herr Papas*, who, in stout complacency, are probably also sitting hand-in-hand and beaming on things in general in a state of mild beatitude that nothing short of an earthquake or an explosion could disturb. There is nothing surreptitious about the matter; no "fearful joy," snatched in a moment of ardour or agony; no blushing or bashfulness, no coyness or tremor, neither haste nor hesitation. No, there they sit; square and broad, solidly satisfied, and partaking of the kisses and the *Butterbröder* with calm impartiality. If the journey be long, you may not improbably be tempted to wish the boat would blow up, so wearisome and distasteful to you will become the enforced proximity of their prosaic familiarities. It will be objected that these are not the manners of good society; nevertheless, they are the manners that will meet you in every public conveyance throughout the length and breadth of the Fatherland; manners authorized by custom and sanctioned by precedent. They have even created a walk of art that must be familiar to you in the cheap coloured prints adorning inn-parlours and humble domestic dwellings, beneath which is

written, for the edification of the unlettered, in three languages, "*Familien-glück*," "*Les Joies de Famille*," "*Domestic Bliss*." One is apt at times, when one's pilgrimage is long, to wish it were a little more "domestic," and reserved exclusively for the parlours which would seem to be the fitting shrines for such demonstrations.

Of customs we can only speak very generally as regards a country where every province has its own peculiar traditions, and where a conservative affection has preserved these with an almost religious exactitude.

Very unpleasant, according to our ideas, is the rule that strangers must make the first advance. Thus when you arrive in a town where you propose to remain for any length of time, you will provide yourself with an introduction or two, you will procure a list of the *Honoratioren*, or honourabilities, of the place, and you will drive from door to door leaving cards. These cards will presently be returned, and shortly afterwards a footman or *laquais-de-place* will call, ask to see the *Herrschaffen*, and will then in due form deliver his master's message, requesting the honour of your company at dinner, on such a day at three, four, or five o'clock as the case may be. When you arrive on the festive scene, it will be your duty to request the hostess to introduce you to all the ladies present. This she will do, presenting you to the excellencies and distinguished personages first, the tour being made according to the nicest gradation of etiquette, so that beginning with an ambassadress you will end with a lieutenant's wife, and then in turn have to receive *your* court, namely, the husbands of all those ladies to whom you have been doing reverence. The curtsies, the obeisances, the compliments, at once embarrass, annoy, and tickle you. Your stiff British backbone doesn't take kindly to the prostrations; your knees resent the genuflexions; you scorn to grovel, yet you fear to offend; you feel ridiculous in your unwonted antics, and are afraid of falling off; and yet a sense of humour would make it difficult, were you more at ease, to abstain from shouts of laughter at the bobbing, sliding, gliding, and grimacing in which you are playing such an unwilling part. You feel that these ladies who dip and wriggle as to the manner born are criticising your want of grace, your rustic air, your wooden-jointed reverences, and yet you swear to yourself by all your gods that no inch lower than is

consistent with your ideas of personal dignity will you sink before these your fellow-creatures. The blood rushes to your face partly in pride, partly in embarrassment, and you wish yourself well out of this *galère*; yet you are angry with yourself with an unreasoning anger for your want of philosophy and your unpliant spine. Experience, it is true, will make these scenes familiar and indifferent to you; you will gather courage to preserve your natural gait, to grant your limbs the freedom to which they have been accustomed, to be polite and pleasant, and to go your own way without attempting to ape manners that went out of fashion in England before Queen Charlotte died. It is only the first step that costs; but it costs a great deal; and it is not easy for a very young woman to preserve the *juste milieu* between a modest desire to conform to the customs of the country and a sense of mortification at aping manners which she does not admire, and cannot cordially desire to successfully imitate. The absurdity of a German curtsy would be ridiculous if it were not sublime.

In all the sociable little *Residenz* towns, the ministers being allowed a certain yearly sum for *Tafelgeld* (table money), are bound to give a proportionate number of balls and dinners; and to these (if you are of the *Gesellschaft*) you are certain to be bidden. To leave you out, because you give neither balls nor dinners in return, would be to insult your class; and this liberal view of social obligations produces a most pleasant result.

How many charming young married women there are in England who would be glad to amuse themselves, happy to dance in muslin, if Mechlin be denied them; how many that would adorn society, make drawing-rooms that are dull with dowagers and diamonds gay with bright youth and pleasant laughter; yet they are not asked, because they give no dinners in return; because the alderman's wife, who is blazing with the diamonds of Golconda and the gold of Ophir, would wonder, and the county member's wife would be disgusted at the simplicity displayed in the cheap gown of the "young person" opposite and marvel at the "queer people" you had got about you. In Germany there is no snobbishness of this kind; there *is* class-prejudice, but let it only be known that you are a lady, your welcome will be just as warm though you come in cloth of frieze instead of cloth of gold. You are asked to amuse

and to be amused; you can enjoy yourself quite as well, though you be only a lieutenant's wife, as though you were a countess from before the deluge; and the consequence of this liberal view of things is, that youth and gaiety, and fresh toilets and bright faces, are generally to be found at German balls, though there may not be so much jewellery and pomp and circumstance as your prejudiced mind may deem desirable on such festive occasions. What you *are*, not what you *have*, is the only matter to be considered; and if you *are* what society expects you to be, you may anticipate what our transatlantic friends term "a good time."

There is a custom — namely, that most inconvenient one of the younger sons all bearing the family title — which, whilst speaking of society, I cannot pass over in silence. So long as cadets of noble families remain within their own borders, it is not, perhaps, a matter of serious inconvenience. Everybody knows everything about everybody else (and a great deal besides), and not a shopkeeper but is perfectly aware what credit it will be safe to give to the young count, between whom and the "county" there are ten stalwart lives, and whose modest appanage barely suffices to find him in gloves and cigars. But it becomes rather a serious matter for a youngster, should exceptional fate send him on his travels, to have *volens volens* a title tacked on to his name. Every innkeeper makes a note of it, and the bill swells into an important document. Should he buy anything, the shopkeeper scarcely expects he will gather up the dirty coppers and debased silver that lie on the greasy counter; should any one bring him a parcel, a *Trinkgeld* must be forthcoming; he cannot haggle with droschky-drivers or squabble with landlords. *Noblesse oblige*, and who is to guess that the young scion of nobility is not the man in possession, not even the rich man's heir? He is, perhaps, a likelier man than either of them, with a greater air of command about him, bearing a bolder front, going through life gaily, and smiling in as debonair a fashion as though the ancestral acres were his, and thousands of thalers made heavy the money-bags at home.

But seeing the insane rage for titles of every description that exists in Germany, it is almost futile to expect that the owners of such distinction as hereditary rank should consent to lay it down; and every Jew banker, every successful speculator,

every petty *employé*, is ready to clamour, cringe, contrive, flawn, or grovel to attain the grand object of this much-coveted distinction. The ridiculous official appellations, the preposterous pretensions, the contemptible hankering after merely honorary titles, makes a certain section of German society the scene of childish rivalries that are a fair butt for the criticism of outsiders.

The old nobility look upon these *Neugebackene* (newly-baked) pretensions with scorn and disgust; the class below such aspirants treat the matter with biting satire; and to outsiders the *comble de folie* appears reached by the wives insisting on sharing the titles of their husbands; so that, if you would avoid offence, you must train your mind and torture your tongue to acquire the custom of saying, "Thank you, Mrs. Privy-Councillor;" "At your commands, Mrs. Over-police Directress;" "After you, Mrs. Riding-Foresteress;" "No doubt, Mrs. Consulting-Architectress," "With pleasure, Mrs. Inspector of Sewers;" "As you say, Mrs. Veritable (*wirkliche*) Privy-Councillor," or Commercial-Councillor, or Doctress, or Assessor. I think, after such vagaries as these, it must be conceded even by democrats that the titles of prince, count, or baron bear about them an antique simplicity.

That love of nature which seems born with every German has brought about a passion for *villeggiatura* for which we have no parallel in England. It is the custom of the prosperous citizen of a Sunday afternoon to repair, attended by his numerous following, to his so-called "garden." Here he will smoke the calumet of contemplation whilst he gazes enchanted on his patch of potatoes or his prolific pear-trees. If he be well to do he will probably have erected a *Sommer-Wohnung* on his patch of ground; a shady arbour will crown a mount overlooking the roadway, and here you will see his spouse, stocking in hand, presiding over the coffee-table, whilst his daughters air their charms (invariably in low dresses) and criticise the passers-by with evident pleasure and much vivacity of manner.

From the streets of the shabbiest little towns, where the fields beyond are within a stone's throw, and where other than the existing urban arrangements would seem unnecessary, you will yet find that the chief butcher and baker have erected their Tusculums, whither they retire, so soon as the warm season arrives, to en-

joy their leisure with dignity. These "gardens" are apt to be rather a thorn in the humbler domestic flesh. Into the mysteries of accommodation it is as well not to pry too curiously; but as a rule the family food has to be cooked in the town, and brought out in baskets lined with baize by the maid of all work, to whom the rural delights are a cause of perpetual aggravation. "Have you a garden?" is no uncommon question for a servant to ask when you are engaging her, and the meaning of it is that no groaning to and fro along dusty highroads is to be included in the bargain.

Very amusing is the custom of imparting all the little items of family news, sending sentimental greetings and fond farewells, through the dirty daily sheet that is published under the title of the *Anzeige*. It makes no pretence to politics; it ignores literature and the drama (except in the form of advertisement); its mission being at once to soothe the feelings and supply the stomach. It mingles the material with the immaterial in a manner that is often intensely comic. In not a few houses it is the only literary sustenance offered to the household, and many a matron would not think the whole duty of woman accomplished unless she had read the *Anzeige* through, from A to Z, before sundown. The communications, taken at random, run much as follows:

To-day, at 11.35 P.M., my dear wife, born Louisa Krämer, was safely delivered of a strong and lively boy.

Adolph Ehlers,
as Husband.

If the donkey left on the patch of common outside the Stone-gate is not claimed before to-morrow, it will be sold.

By Order of Police.

We have the honour to announce to our friends and the public the betrothal of our daughter Margarette with Mr. Auscultator Schmidt.

August Meyer,
Emilia Meyer, born Sanger.

To-morrow I shall receive fat herrings, as also superfine oysters and Elbe salmon, from Hamburg. Pondering persons (*darauf reflectirende*), be pleased to make a note of it.

Wilhelm Braun.

To those friends who accompanied us as far as the "Green Huntsman" on our departure, we send once again our hearty greetings and farewells.

Karl Schroeder, Max Stumpf, Fritz König.

To-morrow and the eight following nights, being moonlit, the gas-lanterns will not be illuminated.

By Order of Police.

The Grand-Duke Henry XXXVIII. of Katzenellenhagen has been pleased to confer, on occasion of his late visit to our Serene Court, the Grand Order of the Cat on Colonel and Adjutant the Baron von Minkwitz; and the same Order (II. Class) on the Major and Court Chamberlain Herr von Goldschlüssel.

If the fool who was kicked out of the Quinze Club on Friday night does not immediately send an apology to the parties insulted, he may look to have his nose pulled on the first convenient opportunity.

Signed, the Club Members.

Prime pork sausages, together with smoked ham and geesebreasts, are to be had from to-morrow (inclusive) every Wednesday by

Widow Bollman.

Bewitching maiden, may thy thoughts wander beneath moonlit skies to him who, forced from thy beloved presence, will never forget the charmed hours spent beside thee in the midst of Nature's green delights.

H. X. M. F.

The cackling of the two geese that has long been a source of suppressed annoyance to the inhabitants of Duke Street is hereby publicly protested against.

The Inhabitants.

With which example we may, perhaps, as well conclude.

From The Saturday Review.
LOST KNOWLEDGE.

It has been observed that, while the boast of the world's progress and of its discoveries of new knowledge is in everybody's mouth, people do not take note as they should of the treasures of knowledge and experience which are forever passing out of it. Every man of mature age who has used his opportunities carries away something at his death which is irrecoverable when once the voice is silent, the hand still, and which one would like to have put on record somewhere, and preserved as part of the universal stock of experience. Yet if an attempt is made to carry out this natural desire the results are disappointing. Things have a way of going into very small compass, and what is most vital and personal in any man's memory is incommunicable. The living witness most often cannot bequeath more than the dead form of his recollections. The wisdom, the humour, the good stories, the true maxims,

all marked by the character of their generation; the humanities that sweeten the worst of times; the salt that is not wanting in the most corrupt—age after age the veil of oblivion sinks over and envelops them all. How small is our knowledge of what is past, whatever the date, compared with what is lost of it! Dr. Johnson in one of his lives of the poets remarks that the materials for a biography die out in two or three years. Yet every generation contains some whose business it is to set on foot traditions. There are within the knowledge of all of us young persons, probably insignificant and unnoticed, who would be very interesting to us if we could but recognize this mission in them; especially if any prevision could tell us that in them our memory would last more distinctly, with more truth of detail, more picturesqueness of outline, than in any other living creature. Becoming conscious of this, it would be impossible not to be solicitous for their good opinion, not to be careful that nothing unworthy of our reputation should transpire before them, not to aim at doing ourselves credit in their presence. We should feel as if always sitting for our portrait if we knew that through them we should live longest—an idea, a person, a fact—after we disappeared out of the region of sense; that our name, invested with an individuality, would pass their lips in the ears of an unborn generation; that our words would be repeated as they were spoken; that our form, action, countenance would be revived through their descriptions; that an image of ourselves would rise real, though transient, in another scene than that we know; that some ghost of our living self would flit before the coming time through their means. It is of no use, however, posturing ourselves for the chance of this prospective celebration, for the future chronicler lies hid. If we set ourselves guessing a thousand to one we should guess wrong; for with the best memory and the most vigilant observation, chance and fancy have more to do with the use of these powers than any deliberate will or intention.

This fleeting, visionary, possible measure of fame, such as it is, represents the biography of the million, more than many of us can reasonably reckon upon; but even biography two-volumed and full-blown depends upon these chroniclers for most both of its use and of its charm. They bring before the reader, not what the man did—which seems, if we think

of it in our own case, so little a part of ourselves—but what he was. They make the difference between a dead and a living record. If we can imagine the feelings of those who know that, whether they wish it or not, their life will certainly be written by somebody, who cannot read an obituary notice in the *Times* without reflecting that their turn will come some day, we can fancy how anxious they must be that something of their real selves may shine through the words, words, words, the flatteries, the bad hits, the mistaken surmises and interpretations that too often make up the account. For we really cannot suppose any respectable shade being pleased by flattering blunders. If he is still open to any terrestrial interests, if his name is still dear, it must be as attached to its owner, with all his characteristics and even failings, himself surviving in it.

A knowledge of the facts which go to make up character is of course a distinct thing altogether from the power of picturing character. A picture of character, however well delineated and true to its subject, has been assimilated and, so to say, digested by the writer's mind. It does not show us the man through his own words, manners, aspects, but only the effect which these and his actions combined have produced upon an acute observer. Clarendon's characters give his own summary; they do not supply us with material on which to form our independent estimate. It is the pure gift of reproduction that some possess, manifesting itself accidentally and without intention, which brings a man and the times he lived in suddenly within our reach, carries us back, and revives the dead. Lively picturesque chroniclers who are to do so much for their generation are of course scarce. Most people are too full of themselves or their objects to note the instruments through which these objects are attained; and mere busybodies or scandal-lovers are a distinct species. But some men are born observers and readers of their kind, of what people say and do apart from any personal concern. How people look when they say and do anything, with what words, what deportment, what tricks, graces, mannerisms—all this is interesting to them, constitutes their intellectual exercise and amusement. Passion, malignity, prejudice, alike disqualify one for taking in correct impressions, and committing them to memory intact. Few things are more delightful than the conversation of such

persons where their powers of expression and other social gifts do justice to their matter—some country rector perhaps, whose life has brought him in contact with every class of the community, and who has found something to exercise his talent in them all. How schoolmasters, and learned doctors, and original thinkers, and fine ladies, and country magnates, and rustics, relics of another state of things, rise and stand before us and say their say by turns! Or it may be the last, least distinguished member of an illustrious literary circle, or some sole lingerer of an exclusive coterie fondly dwelling on the memories that are now his world. What strange exciting intercourse have we been holding; what darkness closes over all when death breaks the magic spell of graphic narrative! Or perhaps it is some keen-sighted, active-minded, well-remembered old maid, whose life has been passed in one spot, herself the depository of other memories, the receiver of old confidences. What can she not tell of the old times—which of all old times are most universally interesting—the times out of our reach, but with which we still own some personal relations! Taking her in the vein we are transported into another world; she rises into the historical. Old scenes, old state, and courtesies, rivalries, courtships, bitternesses, diversions start into being; and always with some marked differences from the received notions of the characters and incidents concerned. The private view very rarely indeed coincides with the view which the outside world has settled into. The images retained, the words and action which emphasize them, all present another picture from our previous conception. The character which posed so gracefully in common fame and report looks a good deal more lifelike and less typical of the lofty virtues, while names which have had an ill sound till now are humanized by redeeming points and shine in unexpected merits.

But oracles of this sort are not to be had for the seeking; the present is with most people an absolute superseder of the past. Nothing is more unsatisfactory than the effort to probe a memory. More especially is the expectation vain that people will remember best what is in itself most important; their personal interests must have been concerned before a sufficient primary impression is made. We try to get from the rustic of average intelligence what the place he

has lived in all his life looked like when he was young, and we are astonished at the oblivion that hangs over things which are called within the memory of man. He has never had words to describe a scene or an effect to himself. So the vanished old hall has left nothing describable in his mind. What he has to say of its vanished inhabitants is hardly more distinct. The old squire used to walk past his door with his hands behind his back; his daughter, once the cynosure of some neighbouring eyes, is solely remembered for the little dog walking close at her heels, which had one jacket for summer and another for winter. Not that such research is ever wholly fruitless. The old fellow warms up. He has had his triumphs, his jealousies, above all his grievances; and he cannot talk of them without some visions of past days rising before his auditor. The bed-ridden old matron, reviving old scandals, lets out old habits and manners by the way; but it needs natural powers above the common, and also a mind at leisure from itself, to have much to tell of a past which in no other way concerned self but that it interested a mind open to impressions.

But much of the knowledge that passes away has little relation to this aspect of the question. What a store of learning passes out of the reach of ordinary men when a great scholar dies, or a skilful doctor, or a subtle, hard-headed lawyer! And it is learning of a kind which they cannot leave behind them, for the gatherings of a lifetime cannot be passed on in the form in which they exist in the mind's experience. The old labourer who has spent his life's strength on one farm cannot transfer his intimate acquaintance with the soil, and with every hedge and ditch and drain which have been his world. Every person whose business makes him acquainted with the characters of men, through contact with their good and bad qualities, carries away with him much important knowledge not transferable. How many rogues must rejoice when the ideal detective quits this lower scene! But, besides this, there are labours and natural products of which the knowledge has died out, or is dying out as we write. We all know of lost arts the secret of which expired with the possessor, but how long will there exist the man who has inhaled the full and exquisite sweetness of the cabbage-rose? We do not believe that the flavour of the golden pippin, so dear to our forefathers,

lasts in living memory; and so of other delights. How few can recall the exhilaration of the old-fashioned country-dance; how few remain who saw Mrs. Siddons act, or heard Tom Moore sing, or Sydney Smith joke, or Coleridge talk. Still, while the few live, we who hear them know something; but the soul of their memories is fast passing out of the world. And to descend to more familiar examples. When a good cook dies—one invested with a genius in intimate correspondence with all the materials of her art, who can foresee the influence of a condiment or an essence upon all with which it comes in contact, who understands combinations and prognosticates results hidden from the vulgar—what knowledge dies out with her, knowledge incommunicable! Not that she would wilfully withhold it, like Lady Bustle, commemorated in the "Rambler," who had culinary secrets which she resolved should perish with her; whose orange-pudding was concocted with such mystery, "while the household was dispersed in all directions till the oven-door closed upon it, and all inquiries were vain." The real mysteries of the kitchen need no such reserve; they are knowledge in action not reducible to words, else would not so many a confection dear to memory be a memory only. Other sauces of as subtle a refinement of flavour, other puddings of as ethereal an excellence, may be in being as we write; but the particular combinations that enriched and poetized our youth, and swell the heart in recalling them, are a lost knowledge, things irrecoverable, alms for oblivion.

Throughout all this range of losses we are lamenting over the inevitable. The world has not room for all knowledge; in every active state of society new knowledge must supersede the old. If all people who had nothing else to do employed their leisure in reproducing their past, they would not find hearers. Old-world histories owe much of their attractiveness to their rarity, and each age has worthies of its own who must not be neglected for those who preceded them. Yet such reflections may have their use in taking down that common assumption that we are in any literal sense the heir of all the ages; that we succeed to all that is good in them, that their amplest wealth is added to our own. Rather, as every period has some grace and charm peculiarly its own, so it has a knowledge and wisdom in harmony with it not to be inherited under new conditions. And as

with communities so with the individual ; whatever can be written passes on, but that which belongs most intimately to the man, and constitutes his worth, and makes him what he is in men's eyes, dies with him. When we lose such a friend we rarely can point to the heir of what was most distinctively his own.

From The Liberal Review.
FEMININE SNOBS.

It would seem that there have ever been class-distinctions and that there ever must be, but there is no valid reason why a number of purely artificial barriers should be raised between the different sections of a community. The creation of these artificial barriers has, in England, done an immense amount of harm, inasmuch as it has excited a great deal of ill-feeling, prevented people from drawing together who would be benefited by communion with each other, and rendered the condition of society absurdly anomalous. Nowadays, society does not consist merely of three classes but of a score or two, the members of which heartily hate and mistrust each other. Indeed, it is not going too far to say that society is divided into an immense number of contemptible cliques ; the result being that when a hundred people are drawn promiscuously together the majority are so impressed with a sense of their importance and exalted condition that they proudly decline to condescend to have anything whatever to say to nine-tenths of those by whom they are surrounded. A man may have brains, he may have refined tastes, he may be hard-working and upright in all his doings, and he may be of presentable appearance, but he is not saved from receiving cruel rebuffs, as he journeys through life, from those who are vastly inferior to him and might be much improved by friendly intercourse with him, but who flatter themselves that they are his superiors in position. Now, men are largely responsible for this melancholy state of things ; but we are inclined to think that the greater portion of the blame—for what is deplored—must rest upon feminine shoulders. No doubt there are many male snobs ; but, as a rule, men are not inclined to be so particular as to whom they associate with as are women, and it is highly probable that if they were not exposed to female influences they might

be led to act so that the lines of demarcation which separate the people of this country might become less broadly defined and in many cases be entirely obliterated. As it is, there are thousands of men who have hundreds of acquaintances whom they cannot—whom, indeed, they dare not—admit to their family circles, and these acquaintances not unfrequently ripen into warm friends. The people whom a man meets at the various places which he visits during his walks abroad please him and he can freely mingle with them without his sense of self-respect being, in any way, hurt, for they are equal to him in point of ability and their natures are as pure and elevated as his own. But he knows that if he were to introduce them to his feminine connections things would be said which would please neither them nor him, so he keeps his knowledge of them, so to speak, to himself and gets his pleasures out of them in a stealthy manner. Perhaps he is wise to act in this fashion ; but it may still be thought that it would be better if he pursued an independent course and elected his friends on the score of their intrinsic merits rather than on that of their meretricious surroundings. It must not be forgotten, however, that he would then, in many instances, be subjected to a never-ending course of "nagging," and it may be remarked that as the constant dropping of water will wear away a stone so will a nagging woman in the end get pretty much what she wants.

It may be asked how it comes about that women are more snobbish than men. Probably this is because they have less real work to do, and so have more time to think about their neighbours and their surroundings than have men ; because they have little actual contact with the world ; and because they have, from their earliest days, the principles of snobbishness carefully instilled into them. The course of education to which schoolgirls are subjected, is, of itself, calculated to make them snobs. Certainly, it would be well if means were taken to render women less snobbish than they are, for bad as a male snob is, a female snob is infinitely worse. For one thing, she is more spiteful. It is the wife of Grandee, and not Grandee himself, who has such a magnificent contempt for people engaged in retail trade that she would become pale with indignation and dismay if it transpired that a daughter of the house of Grandee was being educated alongside the daughter of Haberdasher, who, though

he could buy Grandee up once or twice, has been unfortunate enough to make his money by selling tape by the yard and buttons by the dozen, while Grandee has dealt in them in the bulk. As for Grandee, if he had only himself to please, he would as soon his daughter were educated with little Miss Haberdasher as with the child of Swindle, the merchant, who has failed once or twice, and very neatly diddled the chief bulk of his creditors; and he only takes action in order that he may have peace and quietness at his own fireside. Indeed, if he were left to his own devices, his Gothic barbarity would carry him still further than we have indicated. He would hob-nob with Haberdasher himself, and he would not be at all annoyed if it came to his ears that his wife had been having a friendly gossip with Mrs. Haberdasher. But his good lady has too much sense to fall into such an indiscretion as this, and she makes it her business to see that his lax notions do not run away with him. Then, again, it is she, not he, who carefully weighs up all the qualifications and possessions of those persons who are introduced into the house of Grandee. It is she who goes in for making people know their places. It is she who can

meet a so-called inferior in the street, and gaze at him as if he were a piece of inanimate sculpture. It is she who can keep would-be upstarts down. It is she who can forsake old friends because they have "become so dreadfully low, you know," that it really would not do to associate with them. It is she who can quietly drop her poor relations because it does not suit her purpose to retain a hold of them, even though by so doing, she might succeed in helping them up to her own level—she is so afraid of being dragged down to theirs. It is she who seems to imagine that those who are paid to serve her are of a race apart from herself, in the same, though a lesser degree, than are dogs, horses, and other animals. It is she who flaunts her riches and power in the face of the world. And, finally, it is she who sees a superiority and potentiality in herself which are not discerned by other people. Of course, the amount of harm that she does is incalculable. It will be, then, for those who have charge of the education of women to consider whether it is not time that their policy were revised, and that instead of girls being taught to be snobs they should be taught not to be so.

THE expedition to the Island of St. Paul to observe the transit of Venus will bring back some interesting observations for the naturalists. At least there appear to have been some very interesting observations made on a tribe of great birds,—so far like ducks that they are much more agile in the water than on land, but without wings half as efficient as ducks,—called the *Sphemiscus*, whose wings are rather fins than wings, and which climbs very laboriously from the sea to the plateaus six hundred feet high, where villages of its nests are built, by the help of legs and beak and wings (or fins) all used in combination. The track up which the males return to the nests is, in fact, worn by constant use into a sort of road, and the birds always keep to it in their ascent. The fishermen on the spot call this bird—which shows no fear of man—"the magistrate," from its grave and weighty appearance. Clearly, this is another of the remarkable links between species of very different habits and instincts.

Spectator.

THE article in the new number of the *Quarterly Review*, on "Indian Missions" is by the Rev. Dr. Caldwell, the well-known Orientalist. It is likely that it will be republished as a pamphlet by the Society for the Propagation of the Gospel, and be also disseminated by the Church Missionary Society, for all such bodies have greatly at heart the principal thesis which Dr. Caldwell supports, that Hindus who have turned Christians in India, have by no means morally deteriorated. Dr. Caldwell—an LL.D. for many years of Glasgow University—was made the other day a D.D. of Durham by diploma—a step considered somewhat rare, as honorary D.D.s are much more common than D.D.s by diploma. It is understood Dr. Caldwell will, if certain technical difficulties can be removed, be shortly appointed to be the first bishop of a new Indian see, where he will have control over many of the chief Hindu pastorates of Southern India.

Athenæum.